KEENE ON THE MARKET

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KEENE ON THE MARKET

Trade to Win Using Unusual Options Activity, Volatility, and Earnings

Andrew Keene

WILEY

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PREFACE

Did you know that Chicago is universally considered to be the number one place in the world for trading? With that having been said, it's not surprising to learn that the most frequent question I get asked is how I got my start in this business and what route I took to get here today. The financial district in the Loop is literally crawling with thousands of young, hopeful professionals determined to follow in the footsteps of a proven, successful trader.

Trading continues to be one of those careers that many people are obsessed with, particularly in finding the path of least resistance to the ever-elusive pot of gold. Movies such as *Wall Street* and *Boiler Room* show how an eager individual interested in finance may virtually become rich overnight.

My story isn't the stereotypical rags-to-riches, feel-good biopic where the protagonist beats the odds to move from the factory floor to the trading floor. I did, however, start at the bottom without having any friends or family in the industry and worked my way up by virtue of my relentless work ethic and innate sixth sense for trading. I graduated from the University of Illinois at Champaign–Urbana in 2001 with a BS in finance and a concentration in accounting. Like many other seniors applying for their first job, I had no idea what I wanted to do with my postcollege life. I had attended the typical career fairs, interviewing for everything from investment banking positions to financial adviser jobs; but from the very outset trading positions were what intrigued me most. All of the big trading firms came to U of I to conduct on-campus interviews, and I had met with Botta Capital Management, Third Millennium, and Wolverine Trading.

Right off the bat I greatly enjoyed the interview process, excelling at the logic problems typically asked in trading interviews, such as "How many windows are there in New York City?" or "If I have a box full of socks containing 17 black socks, 11 yellow socks, and 9 red socks, how many single socks do I have to take from the box to guarantee myself a pair?" These questions drew on my natural mathematical strengths, convincing me that trading was the career path I was meant to take. Even my father said it was a perfect fit, because, as he put it, I was never the corporate type, and the divergence from the typical "hamster wheel" would appeal to my short attention span.

During the fall of my senior year, I accepted a job with Botta Capital Management with a start date scheduled for August 28 of the following year. This was perfect, as I would be able to travel in Australia and New Zealand following graduation. However, upon my return I received a disappointing phone call saying that due to low volume, my start date had been pushed back to March of the next year.

With six months of unexpected free time, I took a job with Caremark as a financial analyst making $45,000 a year. Despite the attractive salary, I hated spending my days in the company of monotonous balance sheets, income statements, and financial ledgers. After six months, Botta called offering a $2,000 bonus if I was still willing to enter their clerk-to-trade program. I was elated at finally being given a shot at my dream job, but simultaneously incredibly nervous that I might fail.

As a young (and broke) clerk, I lived at my parents' house in Deerfield, Illinois, and commuted to the city with the other suburbanites. Every day, without fail, I took the 5:40 A.M. train and arrived in the city at 6:30 A.M. I would then jog from the train station to the Chicago Board Options Exchange (CBOE) as fast as I could to be in the office at 6:40 A.M. sharp and ready to begin work. From the very start, I felt tremendously comfortable in the trading environment, and I enjoyed the camaraderie of this new, more sophisticated fraternity.

Botta's clerkship program was 9 to 12 months in length, and to say that it was intense would be the understatement of the year. Our structured training involved classes and mock trading daily, and weekly tests to assess our progress. My trading class started with 13 potential traders and, as I always say, "in trading, you either get it or you don't." Terms such as puts, calls, straddles, swaps, and volatility were introduced to us, and fortunately I got it almost instantly, picking up each new concept more quickly than the one before.

I was one of the last traders remaining at Botta when the firm became insolvent in 2005. I then planned to work for another trading firm, Cutler Group, but, out of the blue, a former partner at Botta named Ed Tilly offered to back me and another trader from my clerk class, Matt Andrews. Ed had joined forces with a veteran options trader named Craig Luce, and together the four of us would establish a new firm: KATL Group (using the first letter in each of our four last names). Ed and Craig offered me a great split (a sliding scale of 80–20 my way), and the partnership ultimately proved to be very profitable for all involved. Over the next four years, there were many ups and downs (which I address throughout this book), but eventually, all good things must come to an end. KATL Group dissolved in 2010, but to this day, the four of us have remained great friends and I will always have the utmost respect for each of the others.

By the time 2010 rolled around, trading at the CBOE had begun to evolve. Electronic trading was becoming increasingly popular and floor trading even more difficult, especially for market makers such as myself. During this period, option prices became tighter and weekly options were introduced. The move from nickel-wide to penny-wide markets was effectively the deathblow, killing the opportunities that market makers on the floor once thrived on, while simultaneously providing the greatest opportunity ever to retail customers.

Floor trading expenses were becoming harder to justify and, after careful consideration (and many sleepless nights), I reluctantly made the decision to leave the floor in early 2011. In my initial time off the floor I tried my hand trading futures and currency pairs, but equity options continued to be my bread and butter. I took some time off to travel and clear my head, and started a trading blog (www.keeneonthemarket.com) upon my return. The blog served as a medium for me to share my insights with those who were consistently losing money and setting up poor risk-versus-reward setups. After months of shifting the direction of the website, eventually the blog became today's Live Trading Room.

Advice to New Traders

New traders frequently ask me to recommend an options book that's appropriate for someone just starting out in the business. In all honesty, there have been very few quality options books written since Lawrence McMillan's *McMillan on Options* (John Wiley & Sons, 2nd ed., 2004) or

Sheldon Natenberg's *Option Volatility & Pricing* (McGraw-Hill, updated ed., 1994). These books will always be considered classics and are must-reads. This book takes many similar concepts and ideas and helps apply them to today's new wave of trading.

When combined with my Live Trading Room, this book is unequivocally the best resource available for today's trading professionals. It addresses every level, from novice to pro, and covers a wide range of strategies—from the basics of put and call options to advanced techniques such as butterflies and condors using measured move targets.

To further emphasize my point, consider the following analogy: *A baseball player may be a great hitter and capable of hitting a fastball or a breaking ball, but until he can also hit a curveball he is not a five-tool player*. A trader must master technical analysis, know the risk-versus-reward setup on every trade, understand the nuances of option strategy, and be able to manage all positions at expiration. Furthermore, until you've honed your craft, you may be able make money in the short term, but consistent profits in the long term will prove elusive.

The ideas and concepts I discuss here in this book and in my Live Trading Room come naturally to me; the more challenging part is conveying this knowledge in a manner that is easy to understand for my audience. Colleagues and members of the trading room have told me countless times how they would love to extrapolate my option knowledge and implant it into their own heads. With this book, I have attempted to do just that. The strategies outlined here are ones I employ on a daily basis while trading my own money to earn a living and pay my bills. Some might tell you that "those who can't do teach," but I don't think this applies to trading, as why would you trust someone to teach you who doesn't have a proven track record or skin in the game?

Here's another analogy: Golfing students can read all the books they want and even go to the driving range every single day, but imagine how much more they could improve if they played golf with Tiger Woods every day. Imagine having Tiger next to you on every hole, advising you on what club to use, wind direction, or the lie of the ball in the fairway. Similarly, I possess a keen feel for equity options trading, and have learned to educate others on how to master my approach. When traders in my trading room e-mail me, I answer any and all questions they have. Oftentimes at speaking engagements, I challenge traders to ask me an options question I can't answer, and I have yet to be stumped. For my private tutorials with clients, I will write quizzes in 20 minutes that have taken even the savviest traders hours to complete.

Guaranteed Profitability?

There are no guarantees in life, and I would never promise a certain number of my trades to be winners, or that my trading style will guarantee that you are profitable. If anyone ever promises you that, you should run for the hills. My goal is not for traders to mimic my trades in hopes of being equally profitable, but rather to provide the tools to allow them to make their own trading style as profitable as possible. I'm a believer in the old proverb "Give a man a fish and you feed him for a day. Teach him to be a fisherman and you feed him for a lifetime." If you read this book and join my Live Trading Room, you will be more knowledgeable about trading than you were before.

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CHAPTER 1

Introduction

My name is Andrew Keene. I'm an experienced options trader and consider myself to be an expert at reading unusual options activity and using it to structure winning trades. Ninety-five percent of all the trading calculations I do I perform in my head. When I was trading on the floor, I had equity options and stock positions in over 120 classes, and I always felt very comfortable with that.

I've always said that everyone in this world has at least one thing they are good at, even though they might spend their whole life finding that thing. Fortunately, I found mine early in my career: It turned out to be trading. I am skilled in talking about trading and teaching about equity options and equity options trading. During my career I have traded over 1 million equity options contracts and 50 million shares of stock and made over $7 million. None of this trading was ever done on a firm's position or firm's account; all of the trades have been from my own account and at my own risk.

I Love to Trade

To put it simply, I love to trade—the rush, the thrill of winning—but more than that, I love the competition of being better than someone else. I'm an extremely competitive person and have competed in every sport from a Brazilian jiu-jitsu tournament to a triathlon. How could I *not* want to get up every morning knowing that when I am at work there is no one I can blame for making or losing money but myself? At work, trading options, I am my own boss. When I'm trading options for my own account I can come and go as I please, and I can set up my trades to make money in bullish, bearish,

Keene on the Market: Trade to Win Using Unusual Options Activity, Volatility, and Earnings, Andrew Keene.

or flat markets. With one click of the computer mouse I can go from long to short, short to flat, and then flat to long. There is nothing I would rather be doing than trading equity options. In fact, the only thing I would change would be to extend the equity options trading hours.

From Young Clerk to Respected Market Maker

Moving into options trading can be a major step in the career of any investor or trader. I have known those who started right out of college and got their first jobs in the exchange pits trading with big firms such as Susquehanna and Wolverine. That is how I got started. I was a finance major with a concentration in accounting and I had no idea what I wanted to do with my life. The big trading firms conducted on-campus interviews and everyone would always hear the stories that traders were alcoholics and drug addicts and gambled their lives away. However, I looked at it another way. The environment they worked in was fast paced and almost rough-and-tumble, with a certain amount of that sink-or-swim attitude. People screaming, loud-colored jackets, questionable hand gestures with unknown meanings—this is the world most people imagine when they hear that I trade options. Trading equity options from my point of view is very simple: you either "get it" or you don't. There is no way to fake understanding trading equity options or complex strategies.

My trading class started with 13 other potential traders, including a Harvard graduate. In addition to our clerk duties, we had class every single day instead of lunch, attended mock trading sessions each day after the close, and were given tests at the end of the week. (Let me rephrase that: every day when the traders were not too busy playing blackjack or roulette for money. No joke—we had a roulette table where one of the traders played "house".) At my trading firm the top tick was close to 100 traders. When I left, as the firm was going out of business, there were only 3 traders still at the company. Out of the 13 traders who were in the class, 5 quit because they hated it, 5 were fired, and 3 of us earned the privilege to trade.

When I started on the floor, I was not ready to trade even after nine months of clerking. To further my education, I then taught the next two classes in the "clerk to trade" program. The time I spent at Botta Capital Management taught me the ins and outs of trading and the training I received was unmatched. Although the company eventually went out of business,

I feel extremely fortunate to have worked with some extraordinary traders such as CLF, CRG, MTA, LVY, and PXT, to name a few.

Generally speaking, the majority of people view the trading world as a ruthless, dog-eat-dog environment. The potential losses are unimaginable to most people; risky lifestyle is reserved only for thrill-seeking maniacs. "Not me," they say, "I would never trade options. It's too risky."

The facts are these: Yes, there are those who have lost big-time trading options. But there are also those who have made money trading options and who continue to make money trading options.

Successful, independent options traders come from all levels of investment exposure. Some were accountants who had previously only invested in mutual funds, but wanted to branch out into options as a way of increasing the returns of an otherwise conservative investment portfolio. Others have been the over-achieving, athletic types, thriving in active, hands-on, competitive situations. For them, the fast pace and potential returns offered by options mean a trading experience like no other. Other potential options traders are those who are looking for more than just the run-of-the-mill, stock buying and selling, and oftentimes glacially slow returns of an all-equity portfolio.

Those looking for more than a "set-it-and-forget-it" trading style, those who want to use large amounts of leverage, those who want to take a more proactive approach to their market knowledge, all with the intent to earn more returns in their portfolio, will do well learning how to trade options effectively and learning how to build trades that are set for maximum profit potential.

Trading Career at the CBOE

I built my name and trading career in the Chicago Board of Options Exchange (CBOE). I was in three different trading pits throughout my career. I started in the GE pit, in which there were around 14 traders. When I first started, I had two of the old-school traders staring me down every time I would make a market or a trade, or even talk for that matter, for almost five months. The pressure was really on, and every night I would go home and almost have an emotional breakdown. I often had to ask myself, "Is this really what I want to do with my career and life?"

As time went on, I got respect from the other traders for being the fastest trader in the pit to make a market, a big "size" trader, and a trader who was always honest and would never back out of a trade. There were many times

when traders would raise their hands to make a trade and then, when the stock moved, they would say they were not in on that trade. As you might imagine, backing out of trades would cause others not to trust you as a trader and think you were dishonest. I knew this was the case, and I always honestly stood by my trades and was loyal to other traders in the pit regardless of whether the trade was a winner or a loser.

I left the GE pit when volume died down and then moved into the Altria (MO) pit and lastly the AAPL pit. Altria (MO) was a fun product to trade; there were always court cases and split rumors such as the Illinois Supreme Court Case for "light cigarettes". I lost almost $40,000 in the three days prior to the announcement of the ruling as the implied volatility exploded and I was short it. Then, when the announcement came and the stock made a small movement, the implied volatility got crushed and I turned around and made almost $55,000 that day, reversing the losses of the prior days.

The AAPL King

During 2006–2009, I was the biggest on-the-floor independent AAPL trader in the world. The stock hadn't yet reached today's $500 billion market cap, but it was an up-and-coming high-flying technology stock. I was the biggest market maker in the Apple pit even before the iPhone or iPad, before Apple became synonymous with a $130 billion plus stockpile of cash. I traded about 125 stocks and heavily traded YHOO during the time of the MSFT-YHOO takeover rumors. There was one trader in my pit who was a bigger size trader in YHOO and that always made me mad.

I did not leave the trading floor out of choice; it was more that it was too difficult to cover the heavy expenses of trading. Rather, the biggest challenge to staying in the business was when the options exchanges listed weekly options, as opposed to monthly options, and then moved the equity options market from nickel wide to penny wide. To put the business in perspective, when I was paying $8,000 a month just for my seat lease, I would have to make close to $300,000 yearly just to break even when I added up all my expenses, commissions, and fees.

In 2006–2009, if a hedge fund, retail bank, or trader wanted to use the complex order strategy to trade earnings, an iPod, or iPhone announcement, the trader would have to trade with me in my "month in a nickel-wide market." Now, a trader can trade many weeklies with a much tighter market. The result of the weekly and penny-wide markets is this is now the worst time in the history of trading to be a market maker, but the best time ever

to be a retail trader. These days, a retail trader like myself can trade any position he could possible imagine without giving the theoretical edge to the market maker. This equates to betting on sports and not paying any "juice" or playing blackjack with no theoretical edge with the house.

Trading options includes the basic *call* and *put* strategies as well as the more complex strategies where traders can profit in almost any direction or lack of direction in the stock. Within the retail trading environment, simple put/call long and short strategies are the most easily executed. These strategies are easy to set up, leverage, and trade, but they miss some of the best-known advantages that options trading can offer. On-the-floor trading was much different: I was not looking at every trade as a risk-versus-reward setup; I would look at it as volatility and as inventory. As a retail trader, I now look at each trade differently. What do I want to do on this trade; where do I think the stock will go? (We'll examine all of this in a later chapter.)

Keene on the Market: Trade to Win Using Unusual Options Activity, Volatility, and Earnings and the Live Trading Room is designed for every person to learn the new wave of trading, which has not been seen in such detailed discussion since Lawrence McMillan's *McMillan on Options*. With this in mind, I used to trade calls and puts, but now I can trade more complex strategies such as *condors*, *butterflies*, and *straddle swaps*. (Which sounds cooler to say: "I bought a call," or "I bought a butterfly"? It's the butterfly for sure, and calls and puts seem boring in comparison!)

From Trading Pit Hotshot to Retail Trader

Once I moved from the trading floor to the screens, I had to restructure my trading plan. On the floor, I didn't care if I lost $20,000 on a position because I knew that I could make it day trading in a different stock. In 2007, Microsoft announced that they were going to buy Yahoo! for $45 billion causing me to lose $40,200 on my position. Not one to be easily discouraged, I kept my head in the game and managed to make over $45,000 trading that day, netting over $4,000 in profit for the day. If I had not been able to stay focused and remain calm (especially knowing how much money I was down), I would never have been able to make that money back. Never underestimate the power of positive thinking! Some people actually believe that until you've blown out your account at least once in your career, you aren't a tried and true trader. I have made a lot of money in my career, but there was a point when I was down to my last $50,000. After losing over $100,000 on AAPL earnings (when the stock spiked to $100 only to sell off to $80 before the

analysts knew they always sandbag their forecast numbers) I needed to take a break from trading and clear my head. I traveled to Bangkok, Thailand, for five weeks, where I taught English and contemplated my options for the future. Still confident in my trading ability, upon my return to the states I took the last $50,000 to my name and went all in; fortunately, it worked out well, as I would go on to have some of the best years of my trading career.

However, now that I have moved to trading upstairs, I can't "sling 'em" the way I once did in the pits. It took me a very long time to transition from the trading pits to the screens; not every trader can make the change. Everything I trade upstairs is a risk-versus-reward setup.

The Live Trading Room: From Options 101 to Complex Strategies

In the trading room, which I run every day, I look at every trade as either a simple or complex trade. I ask myself, "Why be simple if I can be complex? Why trade a call spread or put spread and get two times my money, when I can trade a call butterfly and possibly get five times my money?" I'll be explaining the ins and outs of these types of trades and trade setups throughout the book, and I'll be putting them in terms that are easy to understand and use.

In *Keene on the Market: Trade to Win Using Unusual Options Activity, Volatility, and Earnings* I describe a method of trading options using time-proven spread strategies. Spread strategies use combinations of calls and puts, long or short, to maximize a trade's profit potential while minimizing a trade's risk or loss potential. For every options setup that I trade, every time I make a trade, I look at the trade as a risk-versus-reward setup with targets and a predetermined plan of attack. I never buy a call for $1 and then say, "I hope I make money on this trade." If I do buy that call for a dollar, I work through the *CRRBTT* part of my trading plan to know ahead of time how and when I will look to exit a trade. The *CRRBTT*, *OCRRBTT*, and *HIMCRRBTT** Trading Plans will be defined and discussed in Chapters 18 and 19; their use has gone a long way in helping me stay profitable, and therefore they have become an integral part of my trading methods. I have used them throughout my 11-year trading career to net 30 percent year-over-year returns on my money.

* *CRRBTT* (*C* = chart; *R* = risk; *R* = reward; *B* = breakeven; *T* = time; *T* = target); *OCRRBTT* (*O* = option volume versus open interest), and *HIMCRRBTT* (*H* = historical volatility, *I* = implied volatility; *M* = measured move target; *C* = chart; *R* = risk; *R* = reward; *B* = *breakeven; T* = time; *T* = target)

This book introduces the world of options trading, dealing with topics such as the psychology of a trader, who the key players are, what is a derivative, what is an option, and complex options strategies and unique trading plans such as the *OCRRBTT* and *HIMCRRBTT*. We will look at how to combine the separate elements of options trades into more complex, yet safer, options trades. Obviously, one of my goals is to make money, but another is to *never* have another blowout. As I mentioned earlier, one is not a real trader until one has had a blowout. I have blown out a few times and questioned myself as a trader and whether I had what it took to make it trading.

However, I've learned a way of trading options that minimizes my potential for loss while increasing my chances for a positive outcome: making money (or at least breaking even). I no longer trade in the pits like I did for so many years; now I trade in front of two computers and seven monitors, what is commonly called "trading upstairs."

Trading is not for everyone, but I know it is for me and I would not trade it for anything in the world.

Questions

1. Traders get respect for being:
   - **a.** Cutthroat
   - **b.** Dishonest
   - **c.** Out for their own good
   - **d.** Honest and never backing out of a trade
2. Trading in the pits can be exciting on:
   - **a.** No-action days
   - **b.** Slow-news days
   - **c.** Days before a major holiday
   - **d.** Days with court cases or split rumors
3. During 2006–2009, Andrew Keene was the biggest on-the-floor independent trader of what stock?
   - **a.** Google
   - **b.** Apple
   - **c.** GE
   - **d.** JDS-Uniphase
4. The best thing to happen to professional market makers was when the options exchanges started listing weekly options.
   - **a.** True
   - **b.** False

(*Continued*)

Questions (*Continued*)

5. When referring to an options market being *pennies wide*, that means that options trade only penny stocks.
   a. True
   b. False
6. Andrew Keene's Live Trading Room is for:
   a. Beginner traders
   b. Intermediate traders
   c. Experienced traders
   d. All of the above
7. Andrew Keene is now a retail trader, meaning he:
   a. Trades on computer screens for other people
   b. Calls in his trades to a full-service broker
   c. Trades on computer screens in an office for himself
   d. Trades in the pits of the New York Stock Exchange
8. In the Live Trading Room, Andrew trades with all *except*:
   a. A detailed time and target plan
   b. Unlimited risk with limited reward
   c. Always defining risk-versus-reward
   d. Proprietary trading plans
9. Which is *not* one of the goals in trading?
   a. Making money for the clearing firm
   b. Having fun
   c. Making money for yourself
   d. Managing trades properly
10. What does *not* affect traders' mental state?
    a. Sleeping patterns
    b. Diet
    c. Relationships in their lives
    d. How many computer screens they have

CHAPTER 2

The Life of a Professional Trader

One of the best things about being an options trader is the large amounts of money that can be made on a daily, weekly, monthly, or yearly basis. Even though the stock market and equity options market are open nearly five days a week, 52 weeks a year, there are often times when if I am not paying attention I could miss a trade for $500, $1,000, or even $5,000. When most traders took breakfast, lunch, or smoke breaks, I sat there focused and determined to make more money. The problem with me is I feel as though I can always do better. If I make $5,000 in a day trading, I want to make $6,000; now that I am writing one book, I am already thinking of books two, three, and four.

I watch price action and price momentum. This market action means both trading volume and volatility, both of which add value to options contracts. This added volume and volatility also means added chances for an options trader to make an income that far exceeds what he could earn working at a regular job. Some traders have made money very quickly trading in the market. In fact, there are stories of professional options traders closing up shop from July until the end of the year and taking friends and family to mountain resorts for month-long skiing vacations or on trips to the Bahamas.

Keene on the Market: Trade to Win Using Unusual Options Activity, Volatility, and Earnings, Andrew Keene.

Perks of Being a Trader

Another benefit of trading is a sense of self-employment—that of being your own boss. The professional options trader is able to take a day off of work whenever he wants; there are no vacation, sick, or personal days in the world of trading that need to be taken. If you need to take your kids to school one day, and you show up to work at 11 A.M. instead of 7 or 8 A.M., there is obviously no one to answer to when you arrive late. If you feel as though you have made enough for the week, and you've made your rent payment, car payment, and extra cash, you can close out all of your positions on Thursday morning and take a four-day weekend. If you are not a grinder and make $3,000 in the first hour of the day, it might be off to the country club or golf course for the rest of the day.

Trading can be a full- or part-time job. Yes, it takes a lot of hard work to get to the point where you can earn a consistent income from it. Yes, it takes a lot of studying to be able to read the market to get a feel for where to enter and exit a trade, and when to take your profits and run. Every stock, futures product, or currency pair is a learning curve that takes time to learn. Even though I have traded for 11 years, if I trade a new product such as corn or hog futures, I will always start in a simulated account until I am consistently profitable and feel comfortable with the product. It also takes a bit of training to know when you've done well for the day, week, or month, and that you most likely won't be able to squeeze any more profits out of the market, and to walk away with those profits.

Some options traders have set up their trading situation where they trade part time, in the morning, and then report to a "regular" job in the afternoon, or even to a part-time job. While the market is open all of the time, you should learn to be very selective as to the trading setups, and as to the trades you commit your capital to, thereby limiting the time you are spending at the computer and maximizing your profit potential. Unlike stocks, which are open for only 13 hours a day, the S&P 500 futures trade for 23.25 hours a day, often with much lighter volume. Some traders decide to move slowly into options trading. They have used the smaller time to trade to their advantage, risking less while having the advantage of a steady income on the side to get them through times when trading isn't good or the market is slow. This gives them the time to learn how to trade effectively and profitably without undue pressure to make profits every day just to pay the bills. Traders under pressure to pay the bills often take risks and place trades in their accounts that a professional would not.

Not Quite as Glamorous as Everyone Thinks

Trading is very challenging if you don't have money saved from previous months or years. Trading when you have to make money to live leads to overtrading, poor decisions, and bad risk management. Professional traders like myself know that the first objective is making money. Second is *capital preservation*. I would much rather sit out a questionable trade with the knowledge that too much of my capital is at risk for the amount of reward the trade offers. "Cash is King"; the market will be open again tomorrow.

Options trading naturally has a short-term perspective. It is really important that traders keep a long-term perspective: Learn to think past the trade at hand and envision your options trading endeavors in the future. I can go from long to flat, flat to short, and short to long with one click of the mouse. That means that I will never be a profitable trader in the long run if I am always bullish or always bearish. Buy-and-hold is dead and I have to trade with the stock market in front of me, not the market that I *want* it to be. Knowing I usually trade better in a bearish stock market does not mean that I should always be short. I might press my short position more if the market is selling off, but if the market is trending, then I want to trade with the trend. If I do trade countertrend, which is very challenging, I want to have a tight stop or have a 3–1, 4–1, or even 5–1 risk-versus-reward setup. If the trade blows up your account, there is less chance you will be around to trade in ten or more years.

The Rollercoaster of Trading

If you are going this route, you can set aside a certain amount of your portfolio for trading only. You can use the bulk of your investable assets to build a rock-solid investment portfolio that consists of mutual funds, bonds, CDs, stocks, or even a small business. Traders have to think of money much differently than people who are trading for a hobby. I think of every trade as a risk-versus-reward setup and consider the possibility of how much I could lose on a trade. In 2007 and 2008, when the world was crumbling, my net worth was swinging $25,000 a day. In 2012, my average daily P&L swing is about $2,000–$4,000, much smaller, because the markets are less volatile. However, I cannot go home and buy a car just because I made $50,000 in a day. There will be days, weeks, months, and possibly years in which I will not

make money, so I have to budget my profits accordingly. Trading for a living is like being on a rollercoaster—up, down, up, and then down—but always make sure that there are more ups than downs and that the amounts made on trades far exceed the amounts lost on trades. For example, if I have a bad day at work, I want to make sure I only lose about $1,000–$2,000 a day. However, if I am seeing all the angles, trading well, and managing trades, I want to make $5,000 in a day. This means that if I am profitable 50 percent of the time and unprofitable the other 50 percent, then in the long run I still make money.

This Is Not Monopoly Money

There are many good things to say about options trading; likewise there are some bad things as well. Much of the bad, however, can be prevented with cash management, risk management, better understanding of the markets, training and education, and a broad-based support group. I have seen many traders who are around tens of thousands of dollars every day and they cannot manage their money. I had one buddy who every time he made $1,000 day trading would go out and buy drinks for everyone in the bar until the money was gone. He did not save any money, did not have a car, and rented his condo. Fast-forward six months, and he started losing money trading. He had no money saved, so I bought his Rolex from him because he could not make the rent and was looking for a backer for months.

You'll need money in your brokerage account in order to make a trade. Granted, you can have your trading account set up to use margin (a form of revolving credit for buying options), but you will need a cash balance in your account before the brokerage firm will allow you the margin balance. Even if you don't want to trade using margin, many brokers require a minimum cash balance to open an account. However, a small amount of money will work while you are just getting established in the options trading world. Most brokerage firms will allow an account to be opened with a deposit of $5,000. Some deep-discount options brokers allow a minimum deposit of $1,000 or even $500.

It Takes Money to Make Money

To trade options as a full-time career, and make a living at it, you will need enough cash to make trades with a larger amount of money involved. Remember, if you would like to make more money with trading, then it

is better to make more trades and take risks. Money does not grow on trees, so it does take money to make money. If you start with $500 in an account, do not expect to grow it to $10,000 unless you get extremely lucky. Think of every trade as a risk-versus-reward setup in terms of a percentage of your total account that you are willing to risk and want to make. I always have my targets and goals for every trade before I get into it. If your account has a balance of $10,000 and your trade is valued at risk of $500, you are then using 5 percent of your account balance on that one position. The 5-percent-maximum rule is what normal traders use, but I actually use .5–15 percent of my total book with the majority of my trades being less than 1 percent of my total book. Keeping your position sizes limited to .5–5 percent of your account balance will go a long way in keeping your account in one piece. This is because you are limiting the amount of your account exposure to 1–5 percent maximum loss with any one trade. We will go over this in "Andrew Keene's Non-Blowout Trading Plan" in Chapter 17.

The Setup

I did not trade like this when I was trading on the floor, but I have to change with the times or be left behind. For example, I am like a professional sports gambler sprinkling bets across the playing field. Will I lose some bets? Sure, but so long as the bets I win are more profitable than those I lose, I will make money. Just like a professional sports gambler, the trades that I have more confidence in I will risk more of my portfolio book on, and the trades that I have less confidence in I will risk less on. This is "Andrew Keene's Non-Blowout Trading Plan," which I will discuss later.

Options can be difficult to master. Reading books, listening to my Live Trading Room at KeeneOnTheMarket.com, and setting up trades in a demo account along with me will go a long way in getting you up to speed with trading options. The secret to being good with options is "time in the seat." This means the more time you spend reading and studying about options and setting up trades the better off you will be when it comes time to trade. Reading books is the foundation of getting your skill set up to the highest level.

In learning the basics of options, start with understanding what the value of an option is related to: the stock an option is tied to, called the *underlying* (see Chapter 8).

Trading Expenses and Opportunity Cost

You need to be making enough money trading to take a paycheck from the account on a regular basis. It helps to think of yourself as a trader for a large hedge fund, or as a salaried trader. I always consider myself as a hedge fund manager who is dealing with a portfolio of stocks or positions. A trader of a hedge fund would need to earn a certain dollar amount each month for living expenses. This amount would be netted against his gains or losses for the period, taking into consideration rent expense, commission, charting programs, and software fees. Amount earned per month needs to be net profit, not just profit trading before other expenses. If his salary as a non-trader plus benefits were $12,000 per month, then a trader would need to net that same amount after all expenses. If trading profit was $15,000 for the month, commissions came to $2,000, office space was $500, and charting was $500, then the trader really only made $12,000 this month, not his $15,000 profits from trading. Most salaried employees never take into consideration how much insurance, commission, office, and other operating expenses can really add up to. Keeping track of all these is very important.

You can use this model as a good system for your options trading. Making consistent profits means that you can make periodic or monthly withdrawals in order to pay yourself a salary and pay for your equipment, Internet and cable bills, periodicals, and so on. Remember, professional traders are trading for a living. While they may or may not be working a 40-hour week, they are trading as their primary source of income. Trading has costs involved, including the wages that you would have to give up since you are not working a desk job at an investment bank, investment research company, or mutual fund. If options trading has gone flat for you for the month, and the market has been slow with a lack of good trading setups, you'll still need to pay the bills.

Also, the very nature of the market can lead to your personal wealth being tied to the rapid ups and downs. There have been times when the market is everyone's friend and it seems like everyone is making money. Other times, the market is in the trashcan, and there are very few trades that can be made with an acceptable risk/reward ratio.

There are options strategies that can work when the market is flat. The best thing about options trading is I can structure a trade if a stock moves up parabolic, goes up on a 45-degree angle, grinds higher, is flat, moves lower on a 45-degree angle, grinds lower, or moves parabolic lower. For each of these situations, I can structure a trade accordingly. On the other hand, there is nothing wrong with just sitting out a market you consider too hazardous for your risk tolerance

or skill level. Obviously, professional traders are in the business to make money. Money in a trading account can act as a cash reserve and a buffer in bad times. Markets can get choppy, flat, or otherwise put you in a place where you would rather not trade. That's okay; there have been times when I've placed only one or two very small trades before noon, only to close them out after lunch and not trade for the rest of the day. I call it sitting on my hands because I can't click my mouse to put an order in the spread book because my hands are on my chair. I have no desire to take a trade simply to have taken a trade. My goal in trading is to make the most money possible, not to make my clearing firm money.

Sticking to a Plan

I always stick to my plan when I'm hunting for a good setup. Out of boredom, some traders develop a taste for risk. If I'm not sure of the timing, or the risk-reward setup payoff doesn't look that good, I'm fine with not trading that day. Getting to the office early, turning on CNBC or Bloomberg, checking the overnight news, even the flicker of the reds and greens on the screen are what options trading is all about. Listening to others' ideas can cloud a trader's judgment, trading style, or beliefs. Stick to your own trading style and always define risk versus reward. Options trading can be one of the most rewarding endeavors, but it needs to be done correctly, with an eye on risk-reward while taking measures to safeguard the longevity of your trading account.

Questions

1. One of the perks of being a trader:
   a. Setting a 9 A.M.–5 P.M. schedule
   b. Making your own hours
   c. Having a boss
   d. The market being open for only eight hours a day
2. Trading can be difficult for all of the following reasons *except*:
   a. Setting up 3–1, 4–1, or 5–1 risk-versus-reward setups
   b. Rollercoaster of P&L swings
   c. Ability to pick and choose when to trade
   d. Difficulty of getting out of positions
3. Trading is like a rollercoaster because:
   a. The P&L swings can go up and down easily.
   b. Making money is easy.
   c. Most traders usually make money.
   d. It is impossible for a retail trader to make money.

(*Continued*)

Questions (*Continued*)

4. The expression that a trading account is not "Monopoly Money" means that money in a trading account can be used to pay bills, a mortgage, or food.
   a. True
   b. False
5. The fact that in options trading "it takes money to make money" means that the clearing firm will give you money to be profitable.
   a. True
   b. False
6. The expression "time in the seat" means all of the following *except*:
   a. Reading books about trading
   b. Listening to my Live Trading Room
   c. Studying all the materials about equity options
   d. All of the above are correct
7. Trading expenses and opportunity cost include:
   a. Cost of rent
   b. Cost of charting and computer software
   c. Cost of not receiving wages from another company and trading on your own
   d. All of the above
8. I compare myself to a professional sports gambler because:
   a. I like to gamble on sports.
   b. I place every trade with the same risk-versus-reward and payouts.
   c. I sprinkle bets across the field, all with different amounts.
   d. I place a trade on every single order I see.
9. A trader can make money when the stock market is:
   a. Choppy
   b. Flat
   c. Bullish
   d. Bearish
   e. All of the above
10. It is good to stick to a trading plan because:
    a. This book tells you to.
    b. You watch CNBC and Bloomberg all day long.
    c. It will keep you to a set time and target.
    d. You should listen to other traders' opinions.

CHAPTER 3

Trading for a Living

Hobby or Career?

Trading for fun and trading for a living are two very different things. Typically, those who trade as a hobby do it purely for fun and are only interested in breaking even. It's not quite that simple when you trade for a living, when your livelihood is based on how profitable you are. In my trading room I trade every day properly with predefined risk-versus-reward setups, and not just on feel. If I could tell every single person in Las Vegas who is hitting a 13 in blackjack against a dealer 6 that they are betting improperly, then I would have done a great service. I can never tell traders in my trading room that they will be profitable, but I can tell them that they will learn how to trade properly, manage risk, and set up good risk-versus-reward situations. If you are otherwise employed, and your budget allows, options trading can be a very entertaining hobby on which to spend your time. I do it as a career as it is my only source of income.

Trading for Amusement

If you trade for fun, make sure you choose assets for your solid portfolio that are somewhat worry-free. You can't have your heart and mind involved in the wild swings of fortunes in options trading if you are

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worried that the majority of your money is at risk. The best way to trade for a hobby is to make sure it stays fun and never risk any money you can't afford to lose. Too many people try to trade with money they can't afford to lose. No trader should ever be trading with their monthly rent or grocery budget or any other money set aside to pay bills. Invest your main portfolio using a conservative style. Some high-net-worth clients at brokerage firms such as UBS, Merrill Lynch, and Morgan Stanley are advised to put 90 percent of their assets in ultraconservative investments such as dividend paying stocks, bond funds, and CDs. These high-net-worth clients then trade with the remaining 10 percent. These funds are the clients' risk assets.

This is very similar to the way my money is set up. I have made a lot of money in my trading career and it most of it has been put in conservative investments such as REITs, covered calls, and corporate bonds. In that basket of money I am trying to earn 5–7 percent per year. Then there is the "cowboy account," my *trading* account. I can lose 2–5 percent daily, but I know that I have returned over 30 percent year-over-year on my cash for the past 11 years' trading. The trading account will swing in profit much more, so I have to take that into consideration.

Enjoying Your Profits

If you follow this portfolio design, you can trade freely with that 10 percent in your options account. As equity options trading can be volatile and therefore risky, limiting your exposure to risk to only 10 percent of your assets, and doubling your risk management procedures by ranking every trade from 1 to 5 (following Andrew Keene's Non-Blowout Trading Plan as detailed in Chapter 17), can yield an enjoyable experience in trading. With this plan, you can relish your gains and enjoy your profits. You can take the profits you've earned from a well-thought-out trade and go out for a special dinner or a trip to Mexico for the weekend with your family. You can save up the earnings from your trading for something really special: a Range Rover Supercharged (my car), or the down-payment on a new house. However, the 10 percent rule is not set in stone. Everyone has a different risk tolerance. I have a higher risk tolerance than most people, so I feel comfortable trading high-flyers such as AAPL, GOOG, Gold, and Oil. Others have a lower risk tolerance and will play slower-moving stocks such as GE, INTL, and SPY.

Moving from Amateur to Professional

I've learned that options trading is most effective when a few goals are set. This is very important, because there is a learning curve when trading. Your first priority is to understand the basic fundamentals of options trading and get to the point where you know how to evaluate and place effective trades. I always tell traders that before they risk their own money, they should trade in a simulated account until they are successfully profitable for at least two months. There is no reason to risk money unless you have proven to yourself that you can make money on a consistent profit basis. I know it might not be fun if there is no skin in the game, but it will teach you a very important lesson. My advice is to think of the simulated account as real money. Take it seriously; manage your risk and trade setups.

Moving from Simulated Account to Real Trading

If you open an account with the right kind of options broker, they will give you access to an online practice account where you can try out some of the more complex trades with simulated money. These demo accounts can be really helpful in getting you up to speed; they allow you to try out some of the setups I've discussed in this book. A demo account (also known as "paper trading") will allow you to try trading when the risk is too high for you to commit real money. This is also a great way to practice entering orders into the spread book. The spread book has a learning curve in terms of entering buy and sell orders for different legs of a trade. This spread book works for almost any complex strategy, such as *covered calls*, *straddles*, *condors*, and my favorite, *butterflies*.

Obviously simulated money doesn't pay the bills or the mortgage; so at some point in paper trading, it might make sense for you to start trading with actual money. Some traders are great in the simulated account, but once they go live with real money they freeze on trades. I've known options traders who have spent years reading books, watching videos, and listening to training lectures on how to become an effective and profitable options trader, yet they've never gotten to the point where they get out there and actually trade!

Try to keep a balance between learning how to trade and actually trading. Learning is good, but trading is better. Keep learning and paper trading as

long as you need to, but try to move along to trading with real money as soon as you feel ready. Only with your actual money on the line will you get to know the emotions that go into winning and losing with options trading. It takes a certain amount of real money at risk to feel the full rush of a winning trade, a trade that turns a profit after being well planned and well executed. Another thing that some of the big trading firms require traders to do is have a *trading journal*. This takes some new market makers almost an hour a day to fill out and record properly, but it really helps them understand their positions. At the end of the day, traders write all the trades they made for the day, whether each trade was a winner or loser, and why they made the trade. This tool will help anyone in his or her trading career.

On the other hand, don't get into risking your money trading options until you're good and ready! Most brokers will allow you to start with a small cash deposit, and you can then try your hand at trading with minimal dollars at risk. You will know when it's time to begin trading with real money; when your skill set has been thoroughly developed by paper trading and consistent studying.

Moving from Simple to Complex Strategies

The two simplest strategies are *purchasing calls and puts outright*. I would not move on to more complex strategies until I felt comfortable with these and I was consistently profitable. If this is true and you have enough in your account to make a big trade the next time an opportunity arises, your goal can finally be to make some real money from trading. Next, you might decide you've got enough in your account to make a big trade when the opportunity comes along. Then your goal might be to make some real money from trading. Everyone is different; it might be that you're into options trading and that a $250 day is good for you! To some, that might not seem like a lot of money; but actually, making $250 a day is over $50,000 annually! And those traders making $500 a day are looking at six figures per year!

Investing in Your Options Education

It's best to get options trading to work for you as you acquire the knowledge to trade. If you were restoring a 1957 Corvette, you'd be spending money on interior parts, paint, tires, and engine work. It would be really easy to

get the same amount as you paid for the basic car into the money spent on fixing it up! On the other hand, once the 'Vette is fixed up and finished (after all the money and time is put into the project) there is a really good chance that the value of the finished car will be worth twice as much as the parts and base car that went into the restoration project. In the meantime, there is a value in the time spent in the garage, with your friends, with the game on in the background, working on the car. Think of options trading in this way: It takes time to learn the skills of trading; it takes time and effort to learn how *not* to lose your shirt when you're evaluating setups. It also takes an investment in equipment and money in an account to actually get to the point where a trade can be made in the first place. But, just like that vintage 'Vette, the value of the result is greater than the value of the parts that went into the project! Stick with options trading. It might take time and a bit of money, but these investments of effort and cash will pay off!

It takes money to make money. Without proper education, learning, and practice one cannot become a successful trader. Being successful at anything in life takes time and practice. Think of driving a car, shooting free-throws, or playing golf. I consider myself the Tiger Woods of equity options trading. I have had very few conversations in my trading career with traders who understand equity options as well as I do. You can read as many golf books as you want, and practice at the range by yourself, but imagine how much better of a golfer you would be if Tiger Woods was next to you telling you which golf club he would use, what he thinks of the wind, and how he would approach the Par 4. I cannot promise that a member of KOTM's Live trading room will be profitable, but what I can promise is that if you are in the Trading Room for a minimum of six months, then you will learn far more about equity options trading and the stock market than you have ever known before. It's like having Tiger Woods in your corner.

Go Slow, Go Pro

If you are interested in becoming a full-time trader, you'll be getting into the world of professional traders like myself. Full-time professional trading means you're spending each day reading about the market, watching the market news on TV, and, of course, trading. Take your time making the transition to trading for a living. I watch the S&P 500 Futures trade electronically for almost 15 hours a day because this gives me a good gage of price action and price momentum.

Defining Goals

Defining goals in trading, as in any other business, is very important. Many young and beginner traders have a *daily loss limit*. This means that once the trader loses a certain amount of money in the day, he turns off his machines—he is done for that day. I think this is a good general rule. Just like playing poker, when most traders are losing money they are thinking differently, more emotionally, and often take trades in order to get their money back. Conversely, some traders have *daily profit objectives*. This means that once a trader makes a certain amount of money, he is done trading and turns his machines off. Although I do not have either of these rules for myself, I do not think they are at all bad for a beginning trader.

A trader asked me the other day how he could trade with Andrew Keene's Non-Blowout Trading Plan if he only has $10,000 with which to trade? We will go over the trading plan in a further chapter, but I told him it is very easy: Start making trades using both of my trading plans (*OCRRBTT* and *HIMCRRBTT*) and have a $100 risk per trade. If you make money on the first 10–15 trades, then move up to $200 or $300 per trade. If you can consistently make money, then move up to $500 per trade and then even $1,000 per trade. This keeps traders limiting their risk at first; as they make more money and feel more comfortable, then they can risk more if they want.

Trading for a living versus trading as a hobby are different and require different strategies. However, in the long run, the goal should be the same: to make money consistently. With the trading plans I discuss later, and the Live Trading Room, taking trading from a hobby to a living can be like the difference between Fantasyland and the real world.

Questions

1. Trading for amusement is fun because:
   a. The money does not matter as much.
   b. Gambling is fun for many people.
   c. Losing money is fun for many people.
   d. Only a and b.
2. Trading can be rewarding. You can compare enjoying profits to:
   a. Buying a new car
   b. Taking a family vacation
   c. Buying a nice condo
   d. All of the above

Questions (*Continued*)

3. Before trading with complex strategies, traders should begin with simple strategies.
   a. True
   b. False
4. It is best to invest in your options education with books, tutoring, and the Live Trading Room to make sure you become the best trader possible.
   a. True
   b. False
5. Trading in a "paper account" means:
   a. Trading with a simulated account
   b. Making the same trades that the traders on TV make
   c. Trading with the hedge funds and mutual funds
   d. Trading with a real-money account
6. When you first start trading you should:
   a. Jump right into complex trades.
   b. Trade only what other traders tell you to.
   c. Go slow at first.
   d. Not do much homework or educate yourself on options.
7. Defining goals is important in trading because:
   a. You always have risk-versus-reward trades.
   b. You make sure that every trade is a percentage of the total book.
   c. You are sticking with Andrew Keene's Non-Blowout Trading Plan.
   d. All of the above.
8. A solid options education is an important part of becoming a good trader.
   a. True
   b. False

CHAPTER 4

Who the Players Are

Market Makers

There are various players in the options trading world. The first group of players are the *floor traders*, the market makers or locals. These are the men and women who are in the pits of the exchanges, and are often what people think of when they hear about "options traders." I got my start trading options on the floor of the exchanges at the CBOE, in the GE pit, and then moving on to the MO pit and finally to the AAPL pit. During my first six months on the trading floor I would go home practically in tears because the three big traders would stand in the front of the pit and stare at me any time I made a market on a trade. Once I got quicker and smarter and became a force to be reckoned with, these traders started to respect me. The way it works is once a trader or market maker moves into a pit for a main product he or she can then trade all the stocks that are traded in that specific pit. So, even though I was in the AAPL pit, I had a book of around 125 different stocks. Within a pit there are two types of traders: the market makers and the DPMs.

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DPMs

DPM stands for *designated primary market maker*. The pits at the CBOE were owned by a few big trading firms. When I first started trading, Botta Capital Management owned three trading pits. A DPM is obligated to make markets in all equity options products in the pit, but he or she automatically receives at least 30 percent of all the paper traded. DPMs are biggest traders in the pit even though they often trade as a group position. Also in the pit are those of us known as *market makers*.

On other exchanges, market makers are called *locals*. Market makers do not have to make markets in every stock, but often they will. They trade on their own account, backed by individuals, firms, or maybe even a "box trader." I started with a trading firm of 100 traders that eventually went insolvent. After that, I was backed by a couple of traders; I did not have to contribute any money up front and I got 80 percent of all the profits with no risk. Nowadays, with the increase in electronic trading, it's very difficult to get an 80 percent–20 percent contract with a backer. Many traders are lucky to get a backer with a 60 percent–40 percent deal. Most of the pits I traded in had 12 to 16 traders with a consistent flow of new traders coming in and others blowing out. Box traders were traders who usually had a machine that gave them a market on an option and didn't need any of their own judgment of implied volatility, direction, earnings, and so on. They were often teased as their trades were then hedged by more experienced traders off the floor.

The Death of Market Makers

From 2006 to 2009, I was the biggest independent on-the-floor AAPL trader in the world. When a broker came in, I single-handedly traded the biggest quantity of options for AAPL. I remember being in the pit during the first iPhone announcement when AAPL peaked past $100, $200, $300, and higher. As I mentioned earlier, I left the trading floor because of the weekly options and the movement from nickel-wide markets to penny-wide markets. If a trader or hedge fund wanted to trade APPL, they had to trade with me on my market in the front couple of months. Usually a market was $1.00–$1.10 and I was 200 up. This means I would buy the option for $1 and sell it for $1.10 and I would buy or sell 200 on those markets. Now the markets are $1.04–$1.06 in weekly options. This movement was the worst thing for a market maker, but the best thing for a retail trader because it allowed him or her to put on any

position without giving up a theoretical edge to a market marker. This would be like going to Las Vegas and getting pure odds for any bet.

Retail Traders

The second group of players is the retail traders. This is the category that I now fall into; it is also the group that most traders who subscribe to my trading room fall into. These are the traders who trade their own money, in their own offices, in front of one or several computer screens. These are the traders who have the best of both worlds: They can be involved in the markets and have the potential to make a living off of the ups and downs of the stock market, and at the same time they are their own boss. Some of these traders have set up their trading as a hobby, and follow the markets loosely, preferring to trade for the excitement and the sense of being in the game. Others have decided to put more time into their trading, and will likely turn a hobby into a career.

Retail traders can learn to read the market and the signals of the larger players to their advantage. Since it is the retail trader's own money, he can directly enjoy the profits in his account. If he has set up his trading as a business, he can develop his trading endeavors to the point where he is actually paying the bills with the profits generated from his trading.

I trade for a living and trade 100 percent my own money. It is all my own money, my own hours, and my own profits. Because I love to trade, I'm in my Live Trading Room every single day the market is open. I often read about the market in my spare time in order to give myself an edge over other traders. I might pick up a copy of a general business magazine on the weekends, like *The Economist* (www.economist.com). I might also read an early morning story on a stock's proposed merger in the *Wall Street Journal* on my iPad while heading to my office. I spend a great deal of time thinking about the markets and ways I can be more effective in trading them. While most people can't seem to get away from their jobs quickly enough on Friday, retail are a different breed. Many are near-zealots, living and breathing the markets. When I get bored at night, I turn on Bloomberg or CNBC to see what is happening in the Asian and European markets. If gold, oil, or copper are moving higher abroad, how might this affect my trading the next day?

Options trading can be very rewarding; it can be much more than just a job. Most retail traders either make it or they don't. The average shelf-life of the retail trader is actually 18 months. The reason is because most traders do not properly design a risk-versus-reward setup. They have too much of their

portfolio in one trade. That is why I set up every trade as a percentage of my total book. (We will discuss this in a later chapter.) Many people start the process of trading without taking the time to learn the techniques of longevity. They take on too much risk; or their positions are too big. They make the wrong trades, and they blow out their accounts early on. Those who go through the learning curve get to know what it takes to trade, how to manage losses (and wins!), and how to keep trading day after day. My trading room focuses not only on profitability, but also on learning how to trade to see another day. One of the hardest things for me to do when trading is to throw my hands up, admit to myself I'm in a bad trade, and punt the position so I can move on.

Hedge Funds

Hedge funds are a type of investment institution managed by private traders and money managers who invest a combination of their own money and investors' money. Hedge funds are usually a secretive bunch and are driven by returns. The pay-scales of the managers and traders of these funds are driven directly by the amount of assets they manage and profits, or *assets under management*. Often these hedge funds are run by former floor traders and algorithmic-based traders or programs. Some of these funds are relatively small, with $10–$50 million in their accounts. Others are much larger, with the largest of these funds having $1 billion or more of assets under management ($1 billion AUM).

While there are many different types of hedge fund strategies, quite a few of the individual strategies are involved with the trading of equities options. These hedge funds can be long or short huge blocks of a stock, and often the strategy of the fund managers is to hide the purchase of these large blocks of stock. One of the techniques they use is to divide the building up of the long or short positions among many brokers or market makers and therefore obscure the fact that in actuality there is only one buyer of the shares.

Because of this secrecy, many hedge funds will place orders for the related stock options of the shares in exactly the opposite direction. These orders will usually be done in the opposite manner also; the orders can be placed in large blocks, or among only a handful of brokers or traders. (In other words, if a hedge fund wants to get long, they will actually buy puts not calls and then buy stock against their puts. They could also buy calls against a short stock position. So, the option trade is a hedge, or opposite direction of their actual stock position.)

Another way that hedge funds use options is to hedge their stock positions. The thing about hedge funds and trading options is that when a hedge fund makes a trade, a market maker like myself does not know whether they have a stock position against their options positions. Some hedge funds or traders use options only for speculation, but others use options to trade with their stock positions. Hedge funds have gotten much sneakier in recent years. If they knew a stock was going to gap up $30, most of the time they would not buy calls, because this is a red flag with the SEC. So, often, the hedge fund will purchase the stock and then purchase puts—yes, *puts*, not calls—against their stock. Then, if the SEC goes after them, they can tell them how they lost so much money on the puts they owned. Similarly, if a hedge fund thought the stock was going lower, they would short the stock and then buy calls against their positions. Once again, yes, *calls*, not puts. They are taking a small loss on the calls but reaping huge profits on their short stock position. This is part of the "new wave" of trading that I teach to other traders; this unique approach has not been explored in more than 25 years of equity options trading. Many equity options books teach similar concepts and ideas, but *Keene on the Market: Trade to Win Using Unusual Options Activity, Volatility, and Earnings* teaches this new wave of trading, which must be mastered in order to realize how equity options trading has evolved in 25 years.

Institutional Traders

Institutional traders are considered to be the bigger players in the market. These might be mutual funds, endowments, or pension funds that are looking to hedge trades, or take outright long or short bets on the market. Money management at many of these pools of funds has become very sophisticated, and many of the professionals that are charged with the success of the funds use options to enhance the returns of the funds, or conversely, to reduce the risk of long or short trades. As I continue to trade, I often see many trades as long positions; most of the time hedge funds, mutual funds, and retail traders are long the stock market because, within the last 100 years, it has always been more profitable to be long the market than short it. I have always made more money to the short side because the stock market usually takes the stairs higher, then the elevator lower. That means that when the stock market goes up it is usually on slow, boring days with light volume and light trading. Then, when we sell off hard, we get much more action, paper, and orders as traders try to protect their long positions. This is also why my two best years trading were 2007 and 2008. Everyone should

figure out when he or she personally trades better or worse. I often take fewer trades when the market grinds higher; I trade much more actively when the stock market starts trending lower.

While these traders are using the same concepts and trading techniques as hedge funds, they usually do so with a more transparent reporting methodology. This means that the long, short, complex, and simple trades that are being used at these funds are open to full reporting to their investors. In some cases, these funds are managed for public entities, such as school districts and state pension funds, and are required by law to publicly post all trades.

Options Exchanges

Options exchanges act as the clearinghouse for the options trading business. While there are many players in the options business—traders, market makers, instructional investors, hedge funds, and retail traders—there are relatively few options exchanges. Options exchanges are both the physical buildings of the exchanges as well as the infrastructure of the exchanges, such as the way in which they allow traders who trade on computers to interact with each other. In this way they are the backbone of the options trading business, allowing options traders from all over the world to gather electronically and trade options contracts. While the trading platform acts as the interface that gives you the information about the market, and provides the red and green blips, the charts, and the market orders, it is actually the options exchanges that are the providers of the information.

I started on the floor of the CBOE exchange. There are now equity options exchanges electronically as well as in Boston, Chicago, Miami, New York, Philadelphia, and San Francisco. Currently I am trading across the street from the CBOE in my own office at KeeneOnTheMarket.com in front of two computers and seven monitors. It is much different than the open-outcry and hand signals we used in the trading pits, but the concept is the same: I'm trading the options contracts, plain and simple. While in the past the information I used to make my trades came directly from what I saw going on among the other traders in the pits, the information I use now is gained from my computer screen. Trading in front of a computer screen is not rough-and-tumble like trading on the floor; trading in front of a computer screen gives you more time to think about and plan your trades. It helps keep you focused on the goal so you don't get too caught up in the excitement of trading.

From a clerk mock trading to the AAPL pit at the CBOE, and eventually to my own business trading "upstairs," it is the options exchanges that serve as the

backbone of the industry. Operating behind the scenes to keep the trades moving, exchanges provide linkups to quotation systems and ensure the business of trading goes smoothly for all market participants.

Questions

1. There are two types of traders in the pits:
   - **I.** The designated primary market maker
   - **II.** The pit master
   - **III.** The pit owner
   - **IV.** The market marker
   - **a.** I and II
   - **b.** II and IV
   - **c.** II and III
   - **d.** I and IV
2. Traders who trade for a hobby are usually following the market loosely, trading mainly for:
   - **a.** The excitement of trading
   - **b.** The sense of the game of trading
   - **c.** The excitement and the fun of winning in the market
   - **d.** All of the above
3. One of the best ways to get up to speed with the markets:
   - **a.** Read about the market once in a while.
   - **b.** Ask your friends what they think.
   - **c.** Take a class on personal finance.
   - **d.** None of the above.
4. Which of the following commodity prices affect U.S. stock market prices?
   - **a.** Gold
   - **b.** Oil
   - **c.** Copper
   - **d.** All of the above
5. When a fund has clients' money to manage it is called assets under management (AUM).
   - **a.** True
   - **b.** False
6. When a hedge fund buys options that are in the opposite direction of its equity positions, this is called a(n):
   - **a.** Opposite bid
   - **b.** Opposite trade
   - **c.** Long/short bet
   - **d.** Hedge

(*Continued*)

Questions (*Continued*)

7. What is the one of the main reasons hedge funds buy puts against stock that is rising?
   a. To prevent too much profit
   b. To let other traders know what they are doing
   c. To make even more money with the trade
   d. To prevent a red flag with regulatory agencies
8. Institutional traders include:
   a. Mutual funds
   b. Endowments
   c. Pension funds
   d. All of the above
9. A market maker in theory wants to make money:
   a. When the stock market only goes higher
   b. When there is a difference between the option's bid and option's ask market (known as the spread)
   c. When the implied volatility is very low in a stock
   d. When there is no theoretical edge for the market maker
10. Retail traders are different from market makers because:
    a. They are not trading in the trading pits.
    b. They do not have to provide a market in an options class.
    c. They do not have to pay for a seat lease.
    d. All of the above.
11. Hedge funds are:
    a. Several retail traders trading together as a group
    b. Very secretive and use many intricate strategies for trading
    c. A name for a pit on the trading floor
    d. Usually trading with $100,000 in a portfolio margin account

CHAPTER 5

Options Brokers and Platforms

The Right Options Broker for You

When opening an account with an online broker, one of the best practices is to check out as many different service providers as you can before sending in the paperwork. Examine all of the nuances of Options Broker A versus Options Broker B; there are similar qualities to all brokers, but the key elements such as pricing, order execution, and tools for technical analysis can go a long way in helping you determine the best choice for your options trading.

Just like everyone trades differently, everyone requires different things in an options trading broker. Some traders like to have all the bells and whistles on their trading platforms, such as details on the percentage chance an option will be in-the-money at any point of time. Other traders don't need those types of add-ons.

Because I do most of my math calculations in my head, I wanted the options broker with the cheapest commissions; the trade-off is that I'd have to give up some customer support. With my level of trading experience and expertise, I do not look at much of the information provided by trading platforms. In fact, I consider much of it to be fluff. I don't need to care about the "percentage chance of an option being in-the-money" at some point in time, or the P&L graph for a call spread.

Keene on the Market: Trade to Win Using Unusual Options Activity, Volatility, and Earnings, Andrew Keene.

I have been trading for so long now, I automatically know the risk-versus-reward for every trade and the impact the Greeks will have on any given position.

There are two basic types of options brokerage firms: the full-service, multi-asset trading account, and its cheaper cousin, the discount options broker.

Full-Service Brokers and Options Trading

The full-service brokerage firm gives you the ability to deposit cash and buy investments. They allow you to invest in all types of financial assets. Most people will use full-service accounts to hold everything from mutual funds, CDs, and equities to IRA rollovers. They will use a certain part of their total assets to trade in and invest in equity options.

Bundling all of your assets within one brokerage firm can have the net effect of allowing you an extra level of margin. Trading options on margin can give you added purchasing power when you are looking for setups in the market.

Another advantage to a full-service brokerage is that this firm type will offer extensive fundamental research regarding underlying assets tied to options contracts or stocks. Fundamental research is the study of an equity's growth rate, estimated future price, and estimated dividend growth rate. This information is used to rate the equity in the near, medium, and long term.

While I don't usually use fundamental research as a basis for my trading in options, you may find it helpful to use it in your trading to get a bigger view of not only the underlying stocks but also the stock markets and the economy in general. Fundamental research, market research, economic research, and the house-holding of investable assets are but a few of the advantages of going with a full-service broker.

I do not need a full-service broker, because I am not interested in most of the services they offer. Commissions are the enemy and full-service brokers tend to have the highest commissions because of their broad offerings. If I traded more on fundamentals and required the research these firms offered, I could possibly justify the expense, but this is not the case. My P&L is not just the profit and loss of my trading, but the profit and loss of my trading *minus all expenses*, including commissions, computer software, rent, and research.

Discount Brokerage Firms

Discount brokerage firms are for the fully self-directed trader. This is the kind of firm where you send in your paperwork, deposit your money, and begin trading. If you have a certain amount of experience and know your way around the market, don't want or need fundamental research from a third party, and don't require assistance from a broker to place the occasional complex, multi-leg trade, then this is the right type of firm for you.

I use a discount brokerage firm. I know what I want to trade and when I want to trade it. Right now, the thing I look for most in a brokerage firm is low commissions, access to technical charts, and a solid financial backing. These are the key elements to any brokerage firm, and when you trade as much as I do and trading every day the market is open, the most important things are how much it costs to trade and how easy it is to trade.

A lot of options brokerage firms offer cheap trading. There are even discount brokerage firms so eager to have you as a client they will offer three months of unlimited trading for free! But don't base your choice of where to open an options account on just price alone. The cheapest doesn't always mean the best priced. An options broker needs a high-quality trading platform, too! A discount broker with the cheapest commissions will likely have very little customer service. If you are the type of trader who finds it necessary to talk to someone on the phone when you have an issue, you might not want to use the discount broker with the cheapest commissions. Just like most things in life, you get what you pay for. Personally, I have called my brokerage firm only twice in the last year and a half; therefore, customer service is not really an issue for me one way or another.

There are brokerage firms where you can choose which exchange you want to send an order to; firms automatically send an order to whichever exchange gives them the best kickback. Additionally, there are many other fees that a trader should consider. Generally speaking, traders will get charged less in commissions if they are providing liquidity versus taking liquidity. Basically, a retail trader gets money back in order to provide a market. Also, be warned of other charges such as cancellation fees and stop-loss commissions. These are all part of the business and fall under the Expenses category.

If I'm entering into a complex trade, or if I want to look at a 50/200 day moving average chart, I certainly hope the trading software of

the brokerage house can help me set this up, and not make it more complex or overly difficult to understand in an active, quick-moving market. I trade in front of seven computer screens. When things are happening fast in the market and I want to get in and make a trade, all of the information that I could possibly need must be available to me at a moment's notice; hence, the trading software must be extremely fast, highly intuitive, and very dependable.

Even if you are trading on a high-powered laptop with ultra, high-speed Internet, it is best you try out the order-entry software of several discount brokerage houses to see what works best for you.

Researching Discount Brokers Firms

The best way to do the research is to first find out which options brokerages are highly rated. Next, open one of the free demo or practice accounts offered as an incentive for you to open an actual account. Download the software; leave the icons on your desktop. Try out your trades on the platforms before making your decision; you will find there are some similarities with each, yet the differences can make or break the broker. If you are just starting out, give yourself a few weeks to work through the trial process. Make sure to set up some of the more complex trades that I talk about in my trading room at KeeneOnTheMarket.com.

I enter close to 90 percent of my trades in the spread book, so it is imperative this feature is user-friendly and easy to navigate. If the trading platform, spread book, or P&L analysis do not offer what I need, the commission costs are irrelevant.

Finally, with both full-service and discount brokerage options trading firms, you'll need to do research as to what type of financial backing the broker has operating in the background. It may be hard to believe that despite all the financial regulation today, some brokerages always seem to make the news due to financial mismanagement, customer mistrust, lawsuits, and so on. Checking into the broker's custodian bank will go a long way in this matter, along with a good overall acceptance of the firm in the trading community. Just because a clearing firm is publicly traded does not mean it has good financial backing. Always try to find out if it has financial worries; and if so, which creditor gets paid back first, and when you would receive your money.

Options Brokerage Firms' Fees

Before making any trades, traders should know all of their expenses. Some clearing firms might have charges that are not laid out. For example, if I am short an option and it expires worthless, does the clearing firm charge me for this? How much does a clearing firm charge me if a long call option converts to stock? I should know how the clearing firm routes its orders and if possible I would want to route my orders to the CBOE first, of course, and then whichever exchange is the cheapest. Are there cancellation fees for single orders, the spread book, or for stock? Basically, for any part of trading, make sure that you open an account and get a list of all charges for trading, even the ones that you might think of.

Use of Margin

The value of equity options is based on the trading value of the equity that underlies the option. In other words, the core value of an AAPL equity option is tied to AAPL stock. If the AAPL stock moves down by a huge amount, an AAPL call option will move down also, but the exact percentage will vary according to the other factors of the option, mainly the *Greeks* of the option. When trading options we have to worry about so many factors, such as delta, gamma, theta, implied volatility, dividends, and interest rates. In stock, it seems so much easier: The stock goes higher and I am long, I make money; I am short, I lose money. If the stock moves lower, if I am long it I lose money; if I am short it I make money. In stock, I always know how much I will make or lose per $1 in stock price move. If I am short 5,000 shares and stock moves down $.25, very easily I make $5,000 × $.25 = $1,250.

If I were trading a stock like AAPL, I would be doing so in a normal brokerage account. Because I am a more experienced trader, I would use the advantage of margin in the brokerage account to buy more stock than my cash balance would allow. Margin in a brokerage account allows the trader to buy more stock by borrowing against the dollar value of a trading account. If I were to use a normal brokerage account to buy AAPL stock, and I had the use of margin, I could buy about 1.5 times the amount of stock I would normally be able to buy if I relied on my cash balance only. I would only have to place the order in my account, and indicate that I would like to use margin

to buy additional shares beyond my cash balance. Brokerage accounts that have margin set up on them will display the dollar amount that can be used to buy stock. This amount is called "purchasing power." Usually, this amount stays at about 1.5 the amount of your account, but sometimes the purchasing power will be extended past the 50 percent mark, up to 60 or 65 percent of additional margin. This is usually dependent on the trader's portfolio in the brokerage account. These are the basics of margin. It seems like a wonderful thing: Although I have only $10,000 in my account I can buy up to $15,000 worth of stock in AAPL. Easier put, I can make even more money, because I am borrowing more from the clearing firm or brokerage firm.

Automatic Liquidation

This might seem like a great trade, but just as you can make more money, now you will receive a *margin call* from the brokerage firm if you start to dip to a level where they think you should be liquidated. This used to mean an actual phone call from your brokerage firm, but in these days of technology and computer trading, a computer program can liquidate your positions in both options and/or stock without notice. In most cases, you probably unknowingly signed a form giving them this right. This has happened to many traders and has not made them happy. This is all based on a "computer algo" based on risk. The algo automatically trades your position and closes it out to control the risk element.

A friend of mine was trading AAPL and she was short 20 AAPL 610-615 call spread for $2.50. She knew her risk was $5,000 and her reward $5,000. This happened at 2:30 P.M. CST on a Friday afternoon and AAPL was trading at $613. So, after expiration, her short 610 calls would convert to short stock and her 615 calls would be worthless, but the computer algo looked at it another way: On Monday's date she would be short 2,000 shares of AAPL or $1.226 million. So, without sending her a message or calling her, the algo liquidated her and made her buy 20 of the AAPL weekly 610 calls for $4.00 or $8,000. The system did not sell her 615 calls, but then, within 10 minutes, as AAPL does, the stock dropped under $4 to $609 and she would have been a $5,000 winner, but now lost because she got liquidated. The moral of the story is: Whoever you are trading with, know when they have "Auto-Liquidation" for stock and options, because the last thing you want is to be a story in my book.

Questions

1. There is no difference among options brokers and platforms.
   a. True
   b. False
2. Full-service brokers can offer which of the following?
   a. Ability to deposit cash
   b. Ability to buy investments such as CDs, mutual funds, and IRA rollovers
   c. Ample amount of research
   d. All of the above
3. When choosing a brokerage firm, commissions are:
   a. The only thing that matters
   b. Fixed across every firm
   c. The same whether full-service or discount options brokers
   d. Just one of many aspects of concern
4. Discount brokerage firms offer which of the following?
   a. Equity options trading at a fraction of the price
   b. Research and fundamental analysis not offered at a full-service brokerage firm
   c. Fierce competition
   d. Both a and c
5. Discount brokers might charge for which of the following?
   a. Cancellation fees
   b. Use of their margin
   c. Exercise of options
   d. All of the above
6. A discount brokerage firm has the right to liquidate some of your positions.
   a. True
   b. False
7. Use of margins allows traders to:
   a. Borrow money from the brokerage firm
   b. Trade at a larger position than usual
   c. Possibly trade at 1.5 times their cash
   d. All of the above
8. It is important to do all research on all brokerage firms before bringing in cash.
   a. True
   b. False

CHAPTER 6

Technical Trading

Security Timing Tactics

Technical analysis examines the supply-and-demand data as explained by variables. Technical analysis can be used for forecasting, and if included in conjunction with *fundamental analysis*, you can have an especially rewarding day-trading enterprise. The big investment traders draw on both of these methods of stock selection, often called the *top-down approach*. When you are looking at the bigger concept and making use of fundamentals, you are operating with a *security-selection approach*. When you make use of stock charts, you are applying a *security-timing strategy*. When I was on the trading floor, I never really looked at technicals or fundamentals; I just traded on implied volatility, paper order flow, and the supply-versus-demand curve for these options. I recently realized how valuable this tool can be and I have combined this with my *OCRRBTT* and *HIMCRRBTT* Trading Plans in order to make myself the best trader possible. I've had three proprietary trading plans in my arsenal for 11 years; I've been consistently tweaking them to improve their efficiency and keep them up-to-date.

The chart of a stock and its option represents an image of the securities price as well as volume over time. The most useful graph is the bar chart. You can probably find a securities bar graph on your current day-trading software or even at any of the commercially available sites on the Internet.

Some trading programs allow you to request price charts and sketch trend-lines right on the graph. When this software application is available, it is frequently possible for you to position your cursor precisely at the

Keene on the Market: Trade to Win Using Unusual Options Activity, Volatility, and Earnings, Andrew Keene.

position you intend to make a purchase or sell order. This helps you visualize where your buys and sells are on the chart. I day-trade futures as well as make trades in equity options and stock. Every futures product trades better on a different interval. For example, Silver, Gold, and Oil move fast and usually with the trend, so I might want to trade these futures on a fast 1- or 5-minute bar. Futures such as the Dow and S&P 500 move much slower, so I want to widen my 5-minute bar to a 15- or 30-minute bar.

Price charts can be changeable with regard to the timeframe they include. To make sure you get a complete background viewpoint you could look at a weekly graph or chart, which shows the securities closing prices at weekend. These weekly charts frequently show historical prices of 52 weeks and greater, and are beneficial to obtaining a point of view of the price history of the security. For day-trading purposes you may wish to change to hourly and then 15-minute charts, in order to get an up-close look at the direction of the security in a shorter time period.

When I trade all of my equity positions in my account, I go through a couple of different graphs. I always look to see how the chart compares to the *Ichimoku Kinko Hyo Cloud*. I first look at the daily chart for options and then often I can expand it to a weekly chart or even a monthly chart. I am a trend trader; I want to trade with the trend. For earnings I might care if MSFT is channeling higher on the weekly chart, if it is beneath the Ichimoku Kinko Hyo Cloud on the daily chart.

If the stock is in a bear channel, then I often do not take bullish trades even if the unusual options activity supports these trades. Also, if on the daily chart of a stock is making higher highs and higher lows and I see bearish activity, I believe this trade will often be made as protection for a long stock position as opposed to a bearish trade. I use the charts to help indicate to me that I am making the right choice when making or not making a trade. This concept will be further covered later in the book.

Bar charts show the closing, the highest, and the lowest price of the session. They also include the volume of the security during that session. Volume is a good indicator when you are looking for support and resistance levels and breakout activity. Often volume can help find breakout to the upside or when a short squeeze might have ended too high. Just as I watch the volume of the unusual options activity it is important to watch the volume of a stock on days after earnings, breakout days, and huge movement days. Is it possible that there might be a massive short squeeze selloff or a liquidation from a big hedge fund?

Support and Resistance Levels

Patterns appear in a bar chart over time and each pattern offers different types of information. Support and resistance patterns show traders the psychology of a security's price. When you draw a line at the average bottom price and top price you come up with the support and resistance of the security. The top line is called the *resistance level* or resistance line. A *breakout* is when the security moves above the resistance level. When a breakout is reached, there will be added excitement in that security, and if the breakout is reached with above-average volume, this indicates the formation of a new trend. It is said that *what is resistance becomes support*. This means that if a stock breaks through resistance to the upside with higher volume, then if the stock sees any selling pressure in the future, the level that was a hard level to break is often where buyers will come into the market, thus making it a *support level*.

The support is the bottom line, and when the security gets to this point, traders will sell out of the security. If there is a lot of volume at the support or resistance, this means that there are a lot of traders using this as entry and exit points. When a security travels past its support or resistance point with a lot of volume, it is thought to be a good breakout. The point of the breakout is called a *pivot point*, and is often followed by a test of the breakout, a time when the market rethinks the breakout and the security falls in price. There is often much activity when a security reaches a support or resistance level, because stock and options traders all over the world have drawn the same lines. Many of them have come to the same conclusions as to where those important levels are and they are ready to react when a level is reached. Support to the downside also becomes resistance. Thus, if a stock is breaking lower and moves through the support level with heavy volume, then many times this level will become resistance. That means if the stock pops back up to this level, where there used to be buyers there will now be sellers.

An ascending triangle or descending triangle is revealed when you draw a line along the top supports and along the resistances. If the lines make a wedge shape, then there is a good chance that there will be a breakout in that direction. If a stock is making lower lows and lower highs in an ascending triangle, most likely it will have a breakout to the downside, as the stock looks very weak.

What Is a Gap?

A *gap* occurs if the trading of a security opens above or below the close of the session before; this is often due to the market's reaction to overnight

news. Then there are two things that are important: a half-gap and a full-gap fill. Let's say that XYZ is traded between $29 and $31 on Monday. On Tuesday, the stock gaps higher to $32. (This is above yesterday's high, hence the gap.) Most of the time there will be buyers in the market at half the level of yesterday's high and the open, at $31.50. Then there will be even more buyers at $31, testing the full gap. Just as support becomes resistance, yesterday's high will now act as support and even more buyers should enter the market.

Dow Theory

Dow theory is used to plot the future movement of a security using the Dow Jones Industrial 30 and the Dow Jones Transportation averages as baselines. There are hourly, daily, and weekly movements in the stock market. The shorter the time period, the faster the movement. When the hourly chart crosses the daily chart and is in the same direction as the weekly chart then the Dow Jones Transportation averages report the same trend. This theory has been around for many years and is still employed by many technical analysts.

Elliott Wave Theory

Elliott Wave theory employs past information of a security's movement to predict future direction. The basis of this theory is that securities in the market have five distinct steps, and these steps form three separate waves. Once all five parts of the wave have worked their way through, a top (or bottom) of the stock will be tested. When a top or bottom is reached, this also marks the beginning of a fresh trend.

There are flaws to the theory, and they are similar to the flaws of the Dow theory, as there is no distinct separation of the different steps, and it is often difficult to determine a step's number in relation to the others; that is, you might be thinking a step is number four in a series when in actuality it is number three or even number two. It can be difficult to decipher the elements of the Elliott Wave accurately. This should not, however, prevent you from determining for yourself its value, as many professional traders rely on its indicators in their trading strategies.

Moving Averages

Don't be too concerned with your calculation of some of the indicators. Indicators such as a 200-day moving average can be easily drawn with some of the software programs that are available. I look at 20-, 50-, 100-, 150-, and 200-day moving averages. If the stock is trading above all moving averages, it is bullish. These moving averages act as magnets that stocks like to test to in order to find buyers or sellers in the market. If the stock is trading above all moving averages except the 20-day moving average, this means that the longer-term averages are higher, but the short-term trend is lower. Once an indicator is drawn on a chart, the chart can be saved and refreshed at each trading session. The moving average is just the average price where the stock closed in 20 straight trading days, and 50, and 100. This does not take into consideration how much it moves intraday and the volume at different price levels.

Fifty-Day Moving Average

Another useful chart to look at is a security 50-day moving average. The measure of a security's rate of movement is called its *momentum*, and is measured by a security's moving average deviation. This number is calculated by dividing the security's closing price by its ten-week moving average. Many professional day traders use this method to analyze securities that have a tendency to be very volatile. This indicator can help you determine when a new trend is in play, and when a security is overbought (too high) or oversold (too low.) Ten-week or 50-day moving averages are also useful in gaining a longer-term perspective.

Forty-Week Moving Average

Many technicians refer to a securities price in relation to its 40-week moving average. The 40-week moving average number for a security is figured by taking the security's ending price for the previous 40 weeks and dividing by 40. The next week would be added to the initial number, and the first week of the group would be dropped. The result is a 40-week moving average and has the effect of smoothing the picture of the securities closing prices. The 40-week moving average is also known as a 200-day moving average (200 DMA).

Then there is the *golden cross*, where the 50-day moving average crosses the 200-day moving average. If the 50 DMA is under the 200 DMA and crosses it to the upside, it is extremely bullish. The opposite is true if the 50 DMA crosses the 200 DMA to the downside.

Magnets and Targets

It does not matter where the stock is trading; there are always magnets and targets. The price level to which a stock is attracted or propelled to can be known as a magnet. Support, resistance, moving averages, and previous highs and lows all act as magnets as a stock will often move to that level in order to attract new buyers or sellers coming into the market. Then there are targets, which act as *Fibonacci levels* (or "Fib" levels) and *measured-move targets* in technical analysis. If a stock is trading between $30 and $35 for an extended period of time and breaks to the upside on heavy volume, then it has a measured-move target to $40. We get this from $35 – $30 = $5 + $35 = $40. Also, as we talked about a half-gap, if a stock is trading between $50 and $100 for a couple of years and is currently trading $85, it might need to test the Fib level of 50 percent to $75 to attract new buyers in the market.

The Stochastic

Another useful indicator is a security's *stochastic*. This is the measurement in percentage terms of the price velocity of an individual security or market index as compared to a range set by a market analyst. The higher the percentage of the stochastic, the closer that security's price is in relation to the preset range. A stochastic of 0 percent would indicate it is at the bottom, while a stochastic of 100 percent would indicate that the security or index was at the top of the range.

Other Charts, Technical Indicators, and Money Supply

The popular periodical *Investor's Business Daily* (www.investors.com) publishes the relative strength number for securities. The *relative strength* of a security is designed to measure the security's relative price change in the year prior and compares it to all other securities. A relative strength number of 80 and above is considered exceptional.

Japanese Candlestick Charts

Japanese candlestick charts are read much like bar charts. The main difference is that Japanese candlestick charts offer more information than ordinary bar charts. The high and low for the day and the opening and closing price of the day are shown. Also, there is a difference in the charts for when the end-of-the-day price is lower than the beginning-of-the-day price, and vice versa. In part due to the many inputs required to formulate Japanese candlesticks, there is something of a consensus among professional traders that these charts are inherently too complicated for serious use.

Disadvantages to Moving Averages

Moving averages work very well on a broad scale, but they fail to account for how much the stock moves during the day. For example if XYZ is $30 and trades down to $25 with heavy volume, then the stock spikes to $35 prior to closing at $30, then the moving average would merely show two days that the stock settled at $30. It does not take into consideration how much volume traded at $25 and how much volume at $30. This would be very important information, so that is why I use the "Cloud," discussed next.

The Ichimoku Cloud

This is my favorite indicator and I take many of my equity options trades off indicators from the Ichimoku Cloud on the daily chart. I also use this indicator in much of my day trading. It is a time-weighted moving average and keeps me on the right side of the trend. A chart is used in technical analysis that shows support and resistance and momentum and trend directions for a security or investment. It is designed to provide relevant information at a glance using moving averages (*tenkan-sen* and *kijun-sen*, in Japanese) to show bullish and bearish crossover points. The "clouds" (*kumo*) are formed between spans of the average of the *tenkan-sen* and *kijun-sen* plotted six months ahead (*senkou* span A), and of the midpoint of the 52-week high and low (*senkou* span B) plotted six months ahead. I am in general a trend trader, so I want to make sure I stay on the side of big money and big paper. I could write a whole book about the Ichimoku Cloud, but basically I want to buy

above the Cloud and sell below it. If I bought above the Cloud, I would have a stop under the Cloud or where the trend has now flipped to the downside. The Cloud takes advantage of time and volume trading at different levels to keep a trader in the direction of the trend. The Ichimoku Cloud has many different aspects and setting it up to chart properly depends on product and timeframe.

Summary

Do I use all of these technical trading tools? No, but I include them in my trading plan so I have the most complete trading repertoire possible. It's like being one of the best hitters in major league baseball, but not being able to hit a curve ball. Eventually, pitchers will realize that you cannot hit a curve ball and soon they will only throw curves to you. Throughout my 11-year career, I have made some bad trades, but I have made many more good trades. I have to realize that technical analysis is a tool that I need to combine with all my other tools in order to be the most complete trader I can be.

If you find a charting system, ratio, or indicator too complicated, too difficult, or too hard to understand, feel free to switch to a chart system or indicator you feel comfortable with. Options trading is difficult enough, and you shouldn't feel obligated to complicate it further.

Questions

1. Traders on the trading floor never really look at the _____ when they are trading options.
   - **a.** Technical indicators
   - **b.** Fundamental indicators
   - **c.** Implied volatility
   - **d.** Paper order flow
   - **e.** a and b
2. Changing the timing of your bar chart from a 5-minute bar to a _____ bar with different futures products, such as from Gold futures to S&P futures, can help you trade with the trend.
   - **a.** 5-second bar
   - **b.** 1-minute bar
   - **c.** 30-minute bar
   - **d.** None of the above; don't change the time of your bar.

Questions (*Continued*)

3. Bar charts show the price including the period's closing, highest, and the _____ price during the time period.
   a. Average
   b. Ending
   c. Lowest
   d. None of the above
4. Volume is a good indicator when you are looking for:
   a. Support levels
   b. Resistance levels
   c. Unusual options activity
   d. All of the above
5. It is very important to watch the volume of stock on days after _____.
   a. Earnings
   b. Breakout days
   c. Large percentage movement days
   d. Important news days
   e. All of the above
6. Which of the following is obviously *not* one of Andrew Keene's trading plans?
   a. *OCRRBTT* Trading Plan
   b. *HIMCRBBTT* Trading Plan
   c. Non-Blowout Trading Plan
   d. Jiminy CRICKET Trading Plan
7. Dow theory combines hourly, daily, and weekly movements in the market with the _____.
   a. S&P 500
   b. Dow Jones 30
   c. Dow Jones Transportation Average
   d. b and c
   e. All of the above
8. Moving averages can be effective indicators when they _____.
   a. Stand alone as information
   b. Are combined for information
   c. Are combined with different timeframes
   d. All of the above

CHAPTER 7

Reading the Market and Implied Volatility

Market Sentiment

There is an well-known expression within the industry that I couldn't agree with more: The stock market goes up like an escalator but down like an elevator. This analogy refers to how slowly the market increases over long periods of time, grinding higher and higher over weeks, months, or even years; yet it only takes one correction for the market to come crashing down in as little as a day or two.

It is interesting to me that the stock market always has huge volume on the bearish days, and as the stock market grinds higher it is usually on light volume.

Make Money in *Any* Direction

Most traders are biased in either the bullish or bearish direction. Some traders are always bullish and some are always bearish; but the best traders are consistently split: sometimes bullish and sometimes bearish. Personally, I don't believe that traders can make money consistently if they are always

Keene on the Market: Trade to Win Using Unusual Options Activity, Volatility, and Earnings, Andrew Keene.

bullish or always bearish. Traders who trade this way will make money when things lean in their direction; but will lose money when the stock market moves in the other direction (and it will).

I compare trading and the stock market to a basketball team. If the Los Angeles Lakers have won seven games in a row, is there a better chance that they will win or lose the next game? I would say *win* the next game. If the Chicago Cubs have lost 10 in a row, is there a good chance that they will win the next game? No; they are a losing team, hence there is a high probability they will lose the next game. The stock market works the same way. If the market is receiving good economic data and good earnings and is up seven days in a row, there is a better chance it will be moving higher on the eighth day than lower. Does this work 100 percent of the time? No; but it does explain why trading with the trend has always worked better for me than trading contra-trend. Truth be told, I've always had difficulty trading contra-trend.

Every trader trades differently. It is up to each individual trader to decide his or her own risk tolerance, timeframe, and targets. I created proprietary trading plans that have consistently worked for me, but that does not mean they will work for every trader. Each trader will set up trades differently with different risk-versus-reward setups according to their own personal risk tolerance. Because I've been trading for so many years and consider myself to be an expert, I have a high-risk tolerance; therefore, I do not mind trading AAPL, GOOG, or crude oil on a daily basis in the trading room. However, if a trader does not care for larger P&L swings, he or she should be trading stocks with lower implied volatility and lower beta.

The Concept of Beta

Beta is a measure of a stock's upward and downward movement as it relates to the overall U.S. stock market. In other words, a stock's beta is a statement that tells the trader how much the stock will move in percentages when the S&P 500 moves up and down. A stock with a beta of 1.0 will move with a 1:1 ratio to the movement of the S&P 500, while a stock that has a beta of 2.0 will move 2:1 with the movement of the S&P 500, or 2× the same movement. The same is true if the S&P moves down: A stock with a beta of 2.0 will move down at a rate of 2× the same percentage of the S&P. The same is true for stocks with a beta of less than 1. A stock with a beta of 0.5 will move at half the rate, and a stock with a beta of 0.25 will move at a rate of one-quarter the same as the S&P. Stocks with higher betas will usually have higher implied volatility because

they have higher historical movement. *Implied volatility* is how much movement is implied historically for a given period; if the stock has moved more in the past than the average stock, most likely it will then move more in the future.

When to Be on the Sidelines

Undoubtedly, trading is fun for many individuals. However, trading seriously to make money or even earn a living requires patience and discipline. It can be fascinating, searching through the charts and news, looking for a trade. The fascination should end there; you shouldn't allow entering and exiting trades to become a goal in itself when you are trading options. It would be better if you got to the point where you *didn't* want to trade, and where you begrudgingly bought and sold options. There are many times when I'm looking at my screens and see trading opportunities. Rather than get into each trade I see, I've learned to sit on the sidelines as much as possible. Cash in my account is good for me: I would rather have cash sitting on the sidelines than be involved in a trade just for a sake of having a trade on the books. I always tell traders in my trading room that my number one goal is to make money for myself, not for my clearing firm. Overtrading is a big problem; many people need to feel that action in their hands, the thrill of winning or losing. What many people fail to realize is that it is ok to take a vacation or a long lunch; there's always tomorrow.

There are many times when trading just isn't good. These are times when the market is not giving up any gains, and there aren't any chances to make money on the downward movement of stocks. On the other hand, I might see a time when there is little movement in the market, and there are trades available, but they are way too complex or costly to set up and therefore not profitable enough. I might put one trade in the books that day, or I might not put any. I offer my spreads in the spread book to make sure I get the best price for them. Anytime I feel there is profit to be made, I'll trade. If there is too much guessing or too great a chance the market won't give an accurate indication as to where it will go, I'll just sit it out.

These are the days that can make or break a trader's account. Knowing the bad days is easy; obviously, I can make money when I know the market is going to go down. Knowing the good days is easy, too; I can make money when I know the market is going to go up. The problem comes when I don't know what will happen and the only thing I do know is that I don't know what will happen. Be on the lookout for these days. If you don't know what

to do, or if you don't have a good idea of what will be profitable, it is *okay to not trade that day*. Keep this in mind when you are getting trigger-happy and want to trade anyway. Wanting to trade is good, but wanting to trade just to trade is bad. Try to get to the point where you are trading to make money. Evaluate each trade as "Can I profit with this trade?" or "Am I trading just to trade (or trading because I'm bored)?"

Questions

1. The stock market usually goes up very fast and then sells off very slowly.
   a. True
   b. False
2. It is possible for a trader to make money:
   a. If the stock market is flat
   b. If the stock market moves higher
   c. If the stock market moves lower
   d. All of the above
3. A stock with a beta of 2.0 will move slower than the S&P 500.
   a. True
   b. False
4. As a trader, it is obviously ok to be on the sidelines when you don't like the trade setups.
   a. True
   b. False
5. According to Andrew, in the event that the stock market has rallied for six consecutive days, there is a pretty good chance the market will sell off during the next trading day.
   a. True
   b. False
6. It is always best to trade stocks or options without a risk-versus-reward setup.
   a. True
   b. False
7. When does the market usually sell off?
   a. Days when the Lakers lose
   b. Heavy volume
   c. Light volume
   d. Friday afternoons

Questions (*Continued*)

8. Which of the following is *not* a futures trading product?
   - **a.** Gold
   - **b.** Silver
   - **c.** Oil
   - **d.** Horses

CHAPTER 8

Options Basics Primer

What Are Options?

What Are Derivatives?

A *derivative* is a financial product whose value is based on a related asset (also known as the underlying). There are many types of derivatives; this book will cover *equity options*. Going further, an equity option is a derivative that is *exchange traded* (meaning that it can be bought by the retail trader with a brokerage account). When you trade options you have the right to buy or sell the equity that is related to the option (call or put) at a set price (strike price) at a set time (expiration date) in the future. It is possible to be at the other end of the options trade, and have the obligation to buy or sell the equity that is related to the option. Remember that the buyer of an option always has the right to exercise his option, while the seller is giving another individual that right to choose. This means that the seller of this option must take delivery of this stock long or short if the buyer decides to exercise his right for long or short stock.

What Are Calls and Puts?

A *call option* is the right, but not the obligation, to buy equity at a strike price by an expiration date. The buyer of this call has the right, but not the obligation, to exercise his option to buy the underlying asset. The seller of the call option has no rights: he or she will be assigned a short stock position at the

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strike price should the call buyer choose to exercise his or her option to buy the equity ("call away the stock") at the strike price before the expiration date. The buyer of a put option has the right, but not the obligation, to sell the underlying at the strike price specified in the contract. The seller of the put has no choice of delivery and might be assigned and be long stock at a strike price by a certain time if the buyer wants to own this equity at that price.

The buyer of a call option could do so, because he thought the value of the stock would increase. We could think of it in terms of AAPL. If I thought AAPL would go up in value from $600 to $700, but did not have enough money to buy it for $600, I could buy a call option on the stock. I could pay the seller $10 for the right (but not the obligation) to own AAPL at $650 in the next five months. If the stock goes to $700, I will profit since I have the right to own it at $650, but if it decreases in value to $300, my call would lose (its) value. Notice that every call value will have a *strike price* (price that I could buy the stock at) and *expiration date* (date the option expires) (see Figure 8.1).

The buyer of a put option would do so, because he thought the value of the stock would decrease. We could think of it in terms of AAPL. If I thought AAPL would go down in value from $600 to $500, but did not want to short the stock, I could buy a put option on the stock. I could pay the seller $10 for the right (but not the obligation) to sell AAPL at $550 in

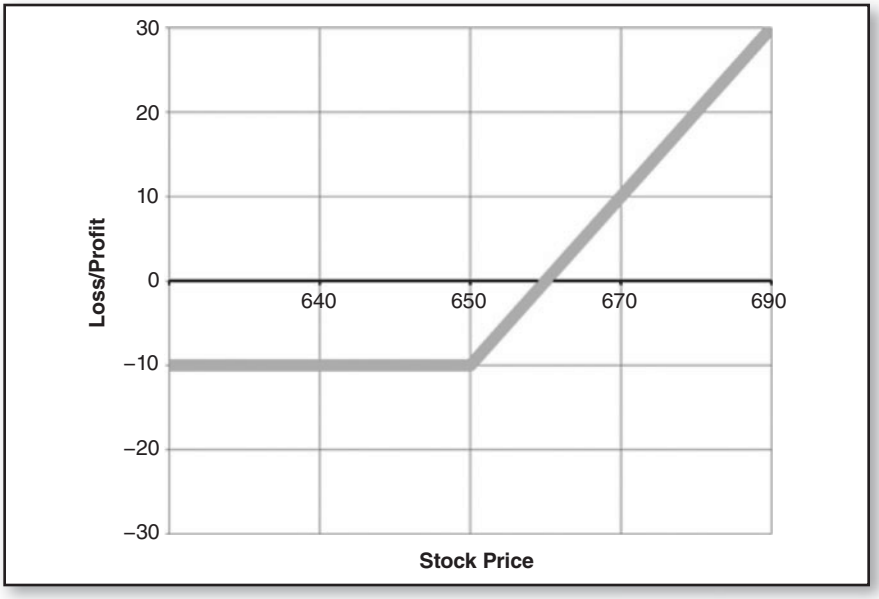

FIGURE 8.1 Long Call

FIGURE 8.2 Long Put

the next five months. If the stock goes to $300, I will profit since I have the right to sell it at $550, but if it increases in value to $800, I only lose the value of my put. Notice that every option will have a strike price (price that I could buy/sell the stock at) and expiration date (date the option expires) (see Figure 8.2).

What Is an Underlying?

With equity options, the stock that is related to the option is known as the *underlying*. If I am trading AAPL options, I know that first and foremost the value of the option contract is tied to the value of the underlying equity, in this case Apple stock. All things being equal, the price of the AAPL options will move up or down in the same general direction of the upward and downward movement of Apple shares. While it is true that some options will have components that make their relationship to the price of the related underlying stock very distant, the first concept to know is that *the price of the underlying will affect the price of the option*. This is true to a greater or lesser extent due to the other elements in the structure of the options contract (details to be discussed in later chapters).

Options: A Deeper Look

An *option* is a contract that gives the owner the right, but not the obligation, to buy or sell a specified number of shares or contracts of a particular asset (usually 1 option = 100 shares of stock), at a fixed price (strike price), by a specified date (expiration date). The seller, referred to as the *writer of a call option contract*, is obligated to deliver the related asset (the underlying asset) at the agreed-upon price. The seller, called the *writer of a put option contract*, is obligated to receive (buy) the underlying asset at the agreed-upon price (strike price). Note that an options trader can both buy and sell an options contract anytime during the life of the option.

Another Example in the GLD

If I buy one call option on the ETF GLD* at 175 expiring on December 12, this means that I have the right to buy 100 shares of the ETF GLD at $175 on or before December 12.

Remember that the option buyer has the *right*, not the obligation. That means that if an option expires in-the-money and I do not want to take delivery of that stock, I could choose not to. The seller of the option does not have the option; he gives that right to the buyer and has the obligation to take the opposite side that the initial trader wants to trade. Keep in mind that for each call options contract I buy, I have the right to buy 100 shares of the underlying asset at the expiration date; all other options contracts are also related to one contract, 100 shares.

Not only do I have the right to buy GLD at $175 on or before December 12, but I also have the right to *not* buy the ETF GLD at $175 on or before December 12. Why is this important? This is the key to buying call options: When I buy call options, I have the *option to buy the underlying on or before the exercise date*.

Here's why this is a good thing for me: Say I buy one call options contract for GLD at $175 that expires on December 12. If GLD moves higher than $175 before December 12, the value of my call option will rise along with the rise in the value of the related ETF (called the underlying ETF—*exchange traded fund*). Instead of waiting until expiration, I could sell my option for

* Exchange Traded Fund for Gold holds gold and trades close to its net asset value over the course of the trading day.

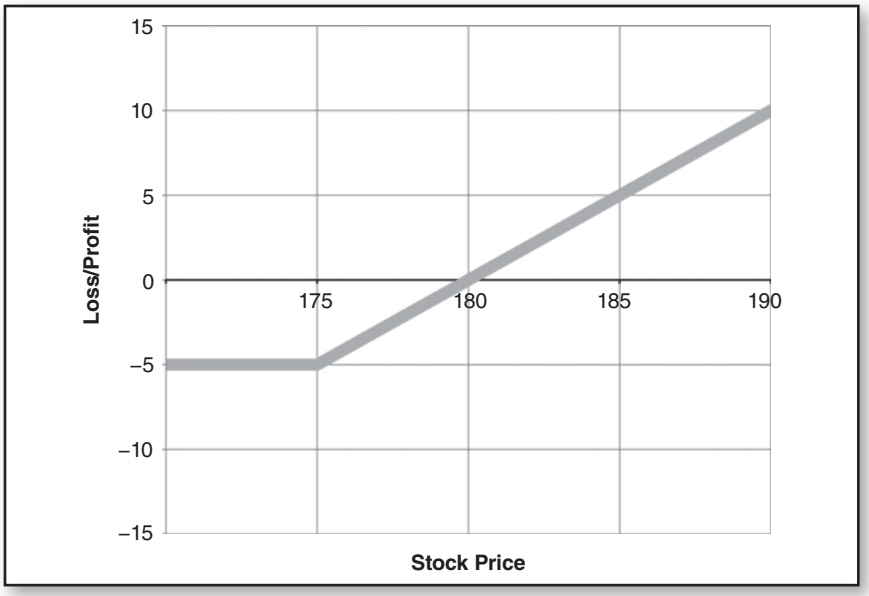

FIGURE 8.3 GLD Long Call

a profit and not take delivery of the stock. The same holds true for all call options, regardless of whether the underlying is a stock, currency, or ETF.

A put option is a contract that gives the buyer of the option the right, but not the obligation, to sell a fixed number of contracts or shares of the underlying asset at a fixed price (strike price), on or before a set expiration date (expiration date). The buyer pays a premium to the seller for this right (see Figure 8.3).

Options Premium

The options premium is made up of two components: *intrinsic value* and *extrinsic value*, or time value. The intrinsic value is the difference between the strike price and the current price for a put and the difference between the current price and the strike price for a call. The extrinsic value portion is made up of several risk factors, such as implied volatility, days to expiration, dividends, and interest rates. With equity options, each options contract represents 100 shares of stock. Keep in mind that for stocks there is no time decay. Essentially, you can hold stocks forever. However, with options your holding period is limited by expiration date of the option.

Options Definitions

In-the-Money (ITM)

A call option is said to be *in-the-money* if the stock price is above the strike price. A put option is said to be *in-the-money* if the stock price is below the strike price. This means that if the option expired today, it would have some intrinsic or monetary value.

At-the-Money (ATM)

An option is said to be *at-the-money* when the stock price is equal to the strike price. If the there is no strike price equivalent to the stock price, then whatever strike is closest to the stock price's will be described as the at-the-money strike.

Out-of-the-Money (OTM)

A call option is considered *out-of-the-money* if the underlying asset price is lower than the strike price. Remember, buying call options is generally a bullish strategy and will benefit from an increase in the price of the underlying asset. Conversely, a put option is considered *out-of-the-money* if the underlying asset price is higher than the strike price. Since it is the opposite of an ITM option, if an OTM option were to expire today it would have zero intrinsic value and thus be worthless.

Option Pricing: Complex Models

Here are some key elements to the market's best-known options pricing models. These mathematical models are used to estimate, derive, and value the market price of an option contract. For options traders like myself, these are good concepts to keep in the back of one's mind whether trading in the pits or in front of the screen. Since options trading can be quite fast paced, I don't normally go through all the calculations for a full-blown pricing model when I trade—but I recommend everyone have at least a working understanding of these models and how they operate. Nowadays, there are many different software programs that will calculate options prices based on the six elements of options: *dividends*, *expiration date*, *strike price*, *interest rates*, *stock price*, and *implied volatility*.

Listed here are the most popular pricing formulas for options. These models seek to calculate the theoretical fair value price for options on stocks:

- Black-Scholes
- Binomial Tree Pricing
- Monte Carlo
- Finite Difference

Of course, it is best to consider the difference between theory and reality in regard to these options pricing models. Calculating an option's value through the use of a pricing model allows me to determine the "theoretical value," but I keep in mind that the assumptions of many of these models work only in an ideal world, and in a theoretical sense. I know that the prices of options contracts often deviate from what actually happens in the real world.

To reiterate, there are six key factors (or inputs) that are involved in the pricing of options:

1. Stock price
2. Strike price
3. Days until expiration (DTE)
4. Interest rate
5. Dividends
6. Implied volatility

Questions

1. An options contract gives the owner the right *and* the obligation to buy or sell stock.
   a. True
   b. False
2. The number of shares of an asset that one option controls is _____.
   a. 1 share of stock
   b. 1 option of stock
   c. 100 options of stock
   d. 100 shares of stock
   e. 1,000 shares of stock
3. The fixed price of an options contract is called the _____.
   a. Settle price
   b. Ending price
   c. Strike price
   d. None of the above
4. The writer of a call options contract is the _____.
   a. Owner of the call options contract
   b. Brokerage firm issuing the call options contract
   c. Trading company that trades the call options contract
   d. Seller of the call options contract
5. The seller of a put options contract is called _____.
   a. The broker of the put option
   b. The maker of the put option
   c. The writer of the put option
   d. The trader of the put option
6. At-the-money options contracts have their strike prices closest to the price of the related stock.
   a. True
   b. False
7. If I own a GLD call option, I am forced to buy GLD at its strike price at its expiration date.
   a. True
   b. False
8. If I own a GLD put option, I am forced to buy GLD at its strike price at its expiration date.
   a. True
   b. False

Questions (*Continued*)

9. An options premium is made up of what two components?
   - **a.** Intrinsic value
   - **b.** Extrinsic value
   - **c.** Value of stock
   - **d.** Base value
   - **e.** a, b, and c
10. A call option is in-the-money if the stock price is above the _____.
    - **a.** Ending price
    - **b.** Settle price
    - **c.** Closing price
    - **d.** Strike price
11. A put option is in-the-money if the stock price is below _____.
    - **a.** Ending price
    - **b.** Settle price
    - **c.** Closing price
    - **d.** Strike price
12. The best trades happen when:
    - **a.** There is unlimited risk and limited rewards.
    - **b.** The risk versus reward is defined.
    - **c.** A trader does not know the risk and reward.
    - **d.** None of the above.

CHAPTER 9

The Greeks

The Greeks are mathematical and statistical functions of price change, speed, acceleration velocity, sensitivity to time, sensitivity to time decay, and volatility of options contracts. The concepts and the math behind options and options trading can get quite complex, but I'm going to explain the core concepts of the Greeks as simply as possible. Remember, options pricing and options trading in general can be very complicated and tricky; learning to keep things simple and correctly applying the relevant core concepts will go a long way in your daily trading.

Delta

Delta is a measurement of the speed by which an option's price changes relative to the change in price of the underlying stock. Therefore, a delta of 1 (sometimes referred to as 100) means the option position is moving 1 point for every point the stock moves. In other words, an option with a delta of 1 (or 100) has an options price movement/underlying price movement ratio of 1:1. A delta of –1 means the option position is moving –1 point for every point the underlying stock moves. In this case, an options contract with a delta of –1 would have an options price movement/underlying price movement ratio of –1:1.

For example, if AAPL is trading at $600 and the $650 calls are trading $10 and they have a delta of $.25, or 25, in theory, every dollar that the stock increases, the calls should increase by $.25. Without going into the other Greeks yet, if AAPL moves from $600 to $605, then the $625 calls

Keene on the Market: Trade to Win Using Unusual Options Activity, Volatility, and Earnings, Andrew Keene.

should increase in price to $10 plus $5 × $.25 = $11.25. It is important to understand the following:

Long calls have positive delta	Short calls have negative delta
Long puts have negative delta	Short puts have positive delta

Delta also refers to the "percentage change" that an option will be in-the-money. For example, a call with a 50 delta has a 50 percent chance of finishing in-the-money. A call with a 70 delta has a 70 percent chance of finishing in-the-money. With this reference to the delta, a 50 delta refers to a .50 delta and a 70 delta refers to a .70 delta. Also, know that the delta of calls ranges between 0.00 and 1.00, and the delta of puts ranges between 0.00 and –1.00. Understanding delta for options traders is essential, for it helps them know how the option's price is going to move when the underlying stock moves.

An option's delta can also refer to a hedge ratio. The *hedge ratio* answers the simple question, "How much underlying stock (ETF or other financial product) needs to be bought or sold to maintain a neutral position?" This is very important for market makers, but not as much for a retail trader. I like to think of it this way: If I own 10 UBS call options contracts and I know that earnings news is coming out for the bank, then I might consider neutralizing my 10 UBS contracts with shares of UBS. I would then look at the delta of the UBS options. If I found a UBS option contract with a delta of 25, then I would need to hedge by selling 250 shares of UBS (10 × 100 = 1,000 shares controlled by the options contracts × the delta of .25 = 250 shares of UBS). Volatility is another factor that helps determine the delta of an option, but we will look at that in a later chapter.

Gamma

Gamma is defined mathematically as the second derivative of delta and can be viewed in two ways: the acceleration of the option position relative to the underlying stock price, or the odds of a change in the probability of the position expiring ITM (in other words, the odds of a change in delta). Gamma can act as an effective early warning to the fact that delta could be about to change.

Long calls and puts have positive gamma. Short calls and puts will then both have negative gamma. Typically, deep OTM and deep ITM options have near-zero gammas because the odds of a change in delta are very

low. Mathematically (and logically) an option's gamma tends to reach its maximum around the option's strike price (the at-the-money option). Gamma is important because it shows us how fast our position delta changes in relation to the market price of the underlying asset. Gamma is always highest in the front month and increases as it approaches the ATM strike price. Also, the closer an option gets until expiration, the higher the gamma will be. This is why trading on the week of expiration or the day of expiration has always been a *huge* challenge for me.

In our example of AAPL, when the stock is trading $600 and the $625 calls are worth $10 and have a 25 delta, let's say they also have a 5 gamma. That means that every dollar AAPL increases in value, there is a greater chance the calls will be in-the-money, thus increasing the delta of the calls, known as the gamma. So, if AAPL increases in value from $600 to $605, then in theory the options should increase in value $10 plus $5 × $.25 *plus* the gamma $5 × $.05 = $11.50. So gamma will help a buyer of options and hurt a seller of positions. This is why if I am long calls I want the stock to move as far higher from the long strike as possible.

Theta

Theta stands for the option position's sensitivity to time decay. Long options have negative theta, meaning that every day you own that option time decay is eroding the *time value* portion of the option's value. In other words, time decay is hurting the position of a long option's position. When you short options, the opposite happens; theta is positive, indicating that time decay is helping the option writer's position. The closer to the expiration date, the higher the theta; the farther away the expiration dates, the lower the theta.

Options decay fastest during the last 30 days to expiration, whereas options decay the least during the final 30 days.

Theta has a direct relationship to gamma, hence whenever the gamma is the highest, the theta is the highest and when the gamma is the lowest, the theta is the lowest.

I always say that *premium kills*, because every day that goes by without the stock moving in your direction the less the option will be. Also, having a time and target is very important, because the thesis can be right, but the option is purchased without proper time and then the trade can be a losing one.

In our example, if AAPL is $600 and the $625 calls are worth $10 and have 20 days until expiration (DTE), then in theory every day that gets

closer to expiration, if the stock does not move, the price of the options will decrease $10/20 or $.50 per day. If the stock does not move for 4 days, implied volatility stays the same, and then in theory the price of this option has now decayed $2 and will now be worth $8.

Rho

Rho stands for the option position's sensitivity to interest rates. A positive rho means that higher interest rates are helping the position, and a negative rho means that higher interest rates are hurting the position. Rho is the least important of all the Greeks as far as stock options are concerned.

Options rho comes in *positive* or *negative polarity*. Long call options produce positive options rho and long put options produce negative options rho. This means that call options rise in value and put options drop in value with a rise in interest rates. Options rho increases as time-to-expiration becomes longer. Options rho is almost equal for all ITM and decreases for OTM options.

It might seem like interest rates are currently unimportant, but I actually was long 200,000 rho one day when the interest rates decreased .25 percent, which means I lost almost $50,000 just for this reason. I was long rho due to the fact that I was long calls and short stock in the GE LEAPs options. Keep an eye on those interest rates, because they can come back to bite you!

Vega

Vega stands for the option position's sensitivity to volatility, or implied volatility. Options tend to increase in value when the volatility of the underlying stock rises. So, volatility helps the owner of an option and hurts the writer of an option. Vega is positive for long option positions and negative for short option positions. Any time I am long calls or puts, I am long volatility. When I am short a condor or an iron butterfly, I am short volatility. I have had many days when I have made or lost money regardless of stock price movement, just on volatility alone. Thus, keeping an eye on volatility and historical volatility is very important.

In our example of AAPL, when the stock is $600, let's say that those $625 calls that are $10 have a vega of .40 or 40 and the implied volatility is 30. Let's say there is a rumor that its current CEO, Tim Cook, might step down. There will be an announcement later this week. The implied volatility then jumps in value from 30 to 40. Well, without the stock moving at all,

the price of the $625 calls would increase in value from the 10-point move × the vega of 4, so $10 + $.40 × 10 = $14. We will further examine vega and implied volatility in a later chapter, as it is one of the most important concepts for options traders to master.

Questions

1. The delta of an option is the percentage chance the option will be in the money.
   a. True
   b. False
2. Which one of these Greeks is *not* used for trading?
   a. Delta
   b. Vega
   c. Theta
   d. Pi
3. Which is *not* a definition of delta?
   a. Measurement of the speed at options price change
   b. Percentage chance the option expires in-the-money
   c. Hedge ratio
   d. Can be over 100
4. The derivative of delta is:
   a. Theta
   b. Vega
   c. Gamma
   d. Rho
5. Which Greek determines how fast an option will decay?
   a. Theta
   b. Vega
   c. Delta
   d. Vega
6. It is not important to know the Greeks of an option.
   a. True
   b. False
7. Gamma is highest at-the-money at the closest to expiration.
   a. True
   b. False
8. The least important of all of the Greeks is:
   a. Theta
   b. Delta
   c. Vega
   d. Rho

(*Continued*)

Questions (*Continued*)

9. An options value can increase without stock movement due to an increase in vega.
   a. True
   b. False
10. Which of the following Greeks does *not* change on a daily basis?
   a. Theta
   b. Gamma
   c. Delta
   d. They all do.

CHAPTER 10

Call and Put Trading Strategies

Successful trading means successful trading strategies. The same is true with successful options trading strategies. In this chapter I discuss both bullish and bearish call and bullish and bearish put strategies that have worked well for me.

Long Calls

A long call option has a bullish outlook. In other words, if I think that the price of the underlying asset will be going up, and I am bullish on that asset, I would consider a long call strategy.

Long Call Strategy	
Outlook	Bullish.
How to set up the trade	Purchase call option.
Advantages	Compared to outright buying stock, this strategy is much cheaper and provides greater leverage on our capital. Additionally, your risk is limited, but there is potential for unlimited reward.
Disadvantages	Potential for 100 percent loss of call value if it expires out-of-the-money. Call prices typically decline when volatility declines. Time is working against you.

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Maximum risk	Capped to the price you paid for the call option.
Maximum reward	Unlimited.
Breakeven	Call strike plus price paid for call.
Time decay effect	Theta is negative and works against your option.
Volatility	An increase in implied volatility would help the price of the option and a decrease would hurt the price of the option.

Typically, using out-of-the-money calls is one of my least favorite strategies. Unless I get a parabolic move higher, these are typically very challenging to trade. This is for two reasons. A long call strategy would also have me long volatility. In general, as stocks move higher, volatility will move lower, so an out-of-the-money call will increase in value as a stock moves higher, but I will lose money as the implied volatility moves lower. Typically, stocks and the stock market usually grind higher, and then go parabolic lower. The moves to the downside are usually the more parabolic ones.

I also consider the Greeks of the long call trade (see Figure 10.1).

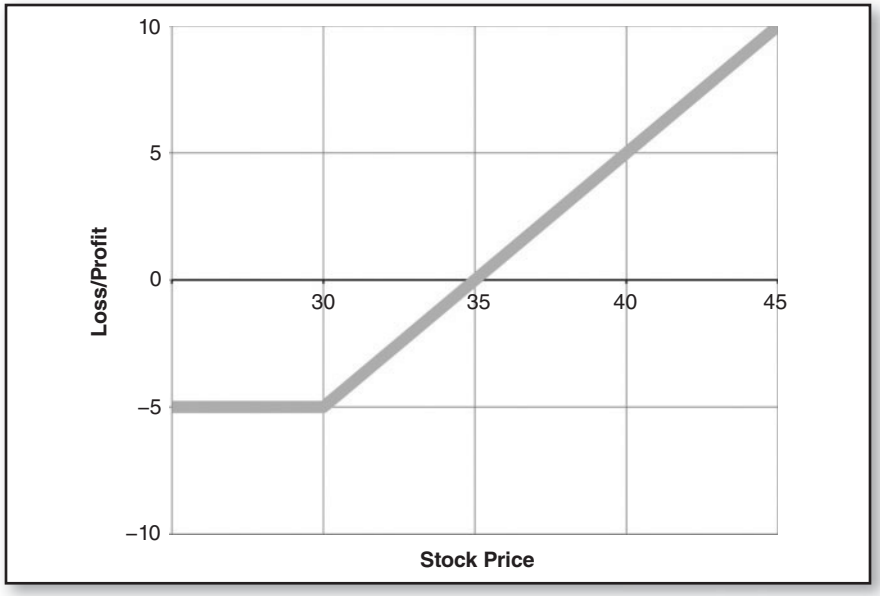

FIGURE 10.1 Long Call

Greeks of a Long Call

Delta	Delta is positive. The lower the strike price, the more in-the-money the option will be and therefore the higher the delta will be. Delta can range from 0 to 100.
Gamma	Gamma is positive with a long call and is the highest when the strike is at-the-money and the option is nearest to expiration.
Vega	Vega is positive, indicating that increased volatility is helpful to the position. Vega is always highest in the back months.
Rho	Rho is positive; higher interest rates increase value of call.

Keene's Trading Tip

Don't buy "dream calls" out-of-the-money. A mistake of novice traders is to buy what I call "Lotto tickets" or calls that are deep out-of-the-money. Even though these options could potentially increase more as a percentage return than ATM options for huge gains, there is a reason they are priced so low. OTM options have low delta; remember, delta can be represented by the probability of an option expiring in-the-money. So the low deltas clearly show that the probability of the OTM calls making money is much lower than for ATM and ITM (see Figure 10.1).

Using Calls Bearishly

When I was on the trading floor and I wanted to get bearish a stock I would buy upside calls and sell "extra" stock against my position as a hedge. For example, if I bought 100 out-of-the-money calls with a 25 delta, often, if I was bearish, I would sell 3,500 shares as my hedge. If the stock went higher, the calls' delta and gamma would increase enough to cover my short hedge, but if the stock sold off hard, I would make money selling those "extra" deltas or extra shares of stock. Since buying calls was a long volatility trade if the stock sold off, I would make money on the short delta of the stock and also on the long volatility I owned.

Buying calls is one of my least favorite strategies because, as everyone knows, when the stock market or stocks increase in value volatility usually decreases. So if I am long an XYZ August 25 call for $1 when the stock is $21 and the delta is 30, sometimes, if the stock moves from $21 to $22, the

call will only increase in value to $1.25 because of the decrease in volatility. Also, stocks usually tend to grind higher, making calls even harder to trade than puts.

Exiting Long Call Positions

Setting up a long call position is only the first part of the trade. The second part of the trade is to exit out of the long call position before expiration. Eventually the trade needs to be exited, profitably or not. Here are two scenarios for exiting long call positions:

Scenario 1	Price of calls rises above breakeven. Before I make any trade, I will have one, two, or even three price targets. I can sell them for a profit or let them ride until expiration.
Scenario 2	Price of calls falls below breakeven. In this scenario your call will then be trading at a loss. In this case I could sell it at a loss, add to the position, or hold out until expiration.

Keene's Trading Tip

When I have long calls, often I will have multiple targets based on levels in the Ichimoku Cloud. I have predetermined levels at which I will want to get out of these calls. If I have a trading plan set before any trade, then it will help keep me from going rogue.

Time Tip

When I compare the prices of a 1-month option to a 12-month option, I will be paying far less per month to own the 12-month option.

Long Puts

When I think an option's underlying asset is about to move downward in price, I look for an option that will be profitable when the underlying loses value. Buying a put option, or a long put, is a strategy that works when I have a bearish outlook.

Long Put Strategy

Outlook	Bearish.
Trade	Purchase put option.
Advantages	Risk is limited with limited reward. Remember, to the upside, stocks in theory can go to infinity, but they can only go to zero on the downside. Higher leverage than outright short stock.
Disadvantages	Potential for 100 percent loss if put expires out-of-the-money. A decrease in implied volatility will hurt this position.
Maximum risk	Capped to the price you paid for the put option.
Maximum reward	Put strike price minus price paid for put (premium).
Breakeven	Put strike price minus price paid for put (premium).
Time decay effect	Theta is negative and works against your long put option; as time passes, the value of the extrinsic portion of the put will erode away.

As with the long call option trade strategy, I consider the Greeks of the long put strategy (see Figure 10.2).

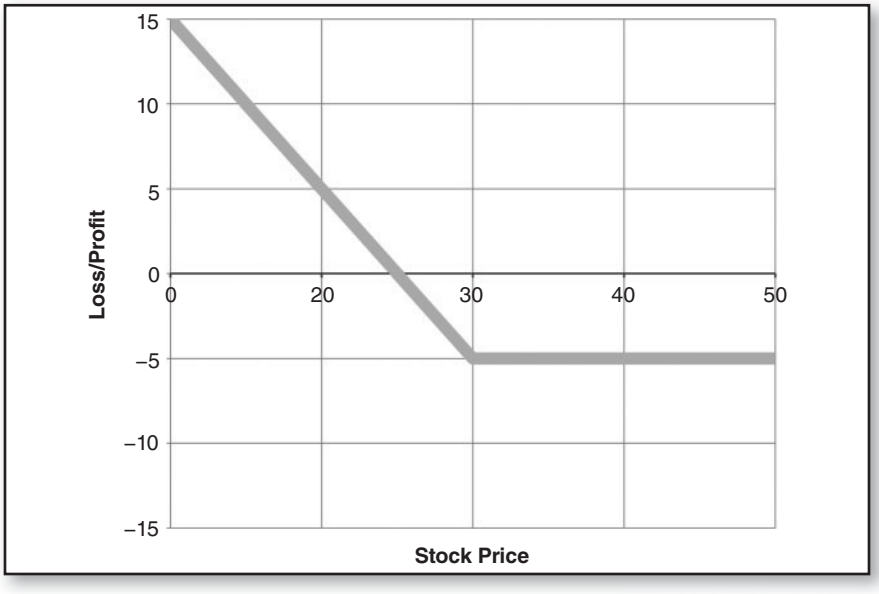

FIGURE 10.2 Long Put

Greeks of a Long Put

Delta	The delta is negative and will be between 0 and –100. The higher the strike price, the closer the delta will be to –100.
Gamma	Gamma is positive and will be highest when stock is closest to the ATM strike and nearest to the expiration date.
Vega	Vega is positive, indicating that increased volatility is helpful to the position. Vega is always highest in the back months.
Rho	Rho is negative.

Using Puts Bullishly

When I was on the trading floor and I wanted to get bullish a stock I would buy downside puts and buy "extra" stock against my position as a hedge. That's right, not calls; I would buy puts. For example, if I bought 100 OTM puts with a 35 delta, oftentimes if I was bullish I would buy 5,000 shares as my hedge. If the stock went lower, the puts' delta and gamma would increase enough to cover my long hedge; if they rallied hard I would make money buying the "extra" deltas, or extra shares of stock. Since buying puts was a long volatility trade if the stock rallied, I would make money on the long delta of the stock and also on the volatility I owned. The further a put is out-of-the money, the higher the implied volatility will move.

Buying puts is one of my favorite strategies, generally speaking, because when the stock market or stocks decrease in value, implied volatility (as measured by the VIX) usually explodes. So, if I am long FB August 25 puts for $1 when the stock is $30 and the delta is 35, sometimes if the stock moves from $30 to $29 the puts will only increase in value to $1.40, due to the increase in volatility. Also, stocks usually get hit hard to the downside, making puts my favorite strategy.

Keene's Trading Tip

I love owning puts even within a high-volatility environment. Owning puts is owning volatility and also being short deltas. I usually trade better and make more money when the stock market is selling off.

Time Tip

Comparing a 1-month option to a 12-month option, you will be paying far less per month to own the 12-month option.

Exiting Long Put Positions

After getting into a long put option strategy, I'll eventually need to get out of the trade. The following are two scenarios to exit a long put position:

Scenario 1	Price of puts rises above breakeven. Before I make any trade, I will have one, two, or even three price targets. I can sell them for a profit or let them ride until expiration.
Scenario 2	Price of puts falls below breakeven. In this scenario your put will then be trading at a loss. In this case I could sell it at a loss, add to the position, or hold out until expiration.

In 2008, when the banking and financial crisis was in full swing, I was long over a million dollars in equity options premium. This meant that I was long volatility when volatility was high. I was always taught that if volatility looks high, it is probably going higher, and if it looks cheap, it will be getting cheaper.

Selling Options

The opposite trade of a long call or a long put (buying calls and buying puts) is to sell calls and to sell puts. This is often called *writing puts* and *selling puts*. Selling options can be tricky. With this in mind, I'd like to bring up my most important rule in options trading: *Never sell options naked!*

I have been an options trader for over 11 years and my experience has taught me that the key to longevity in this business is to prevent catastrophe. Having blown out my account once, the scars of not managing risk/reward have permanently adjusted my trading strategy toward capital preservation first and profit seeking second. Selling options naked is a poor risk-versus-reward model for most traders and exposes your capital and your trading career to "unjustifiably" large amounts of risk.

There are so many newsletters and subscriptions that sell the famous *covered call strategy*. This is a *position*, not a trade. This is a buy-and-hold strategy. Let's walk through a trade and talk about AAPL at $700. I could sell the 700 calls for $15 in the front month, expiring in the next 25 trading days. I

would buy stock and sell the calls to create an extra "dividend" stream. This is if I look at it as a risk-versus-reward setup. The most I can ever make is the $15 I sold the calls for, or $1,500 per 1 lot. If there is a report that the iPhone causes cancer and the (AAPL) stock goes to zero, I could lose $685, or $68,500 per 1 lot. Does risking almost $70,000 to make $1,500 seem like a good risk-versus-reward setup? I think not!

Since stocks can theoretically go to infinity, selling naked calls means blowout risk. When I was on the trading floor, did I ever sell calls or puts naked? Of course! But now that I have moved upstairs I have to worry more about capital preservation. In my trading room I always say that you are not a real trader until you have blown out an account. I lost $162,000 in CECO in June 2004 during the SEC investigation of their accounting practices when I was too stubborn to cover puts that I was short for $.05 that went to $.50 and then went to almost $5! My primary trading strategy is *capital preservation*. Gains are a secondary goal. I first evaluate each trade with the thought of keeping my account balance intact; only then do I think of how much money I can make. This goes a long way to keeping money in my options trading account, ready to trade the next day.

Time Decay with Short Options

So far, our examples have been toward having a long option position in which time decay (theta) is eroding the value of the option. In contrast, when you write options (short position) this time decay is a benefit. As a short seller of options you want the option to expire as quickly as possible, thus retaining all the value you initially sold to the buyer.

Once again if I am short calls or puts I always make sure I am also long other calls or puts to prevent blowout risk. Most investors actually think it is riskier to sell puts than calls, but in theory this is incorrect. People think this way because stocks tend to go down in value much faster than they go up. Puts have defined risk as stock can only go to zero, but calls have unlimited risk as stocks can go to infinity, so in theory short calls have higher risk than short puts.

Short Calls

Selling calls naked (without a hedge), although a bearish strategy, is one of the worst risk-versus-reward trades there is. As Figure 10.3 displays, the profit portion extends down and to the right. This indicates your risk of loss is technically unlimited while offering only a limited reward. This is a very

advanced strategy that in my opinion is used in shorter timeframes as a trade to collect options premium in expectation that the option sold will expire worthless, allowing the trader to keep the credit received.

Short Call Strategy

Outlook	Expectation that the stock will either stay flat or make a bearish move.
Trade	Sell a call option.
Advantages	Time is on your side: a decrease in implied volatility will help your position.
Disadvantages	Unlimited risk; short volatility.
Maximum risk	Unlimited.
Maximum reward	Capped to the price you sold the call option for.
Breakeven	Call strike price plus price of call sold.
Time decay effect	Theta is helpful to this position, eroding away the value of the calls as time passes.

As with the other options trading strategies, I keep in mind the way the Greeks are working on the trade (see Figure 10.3).

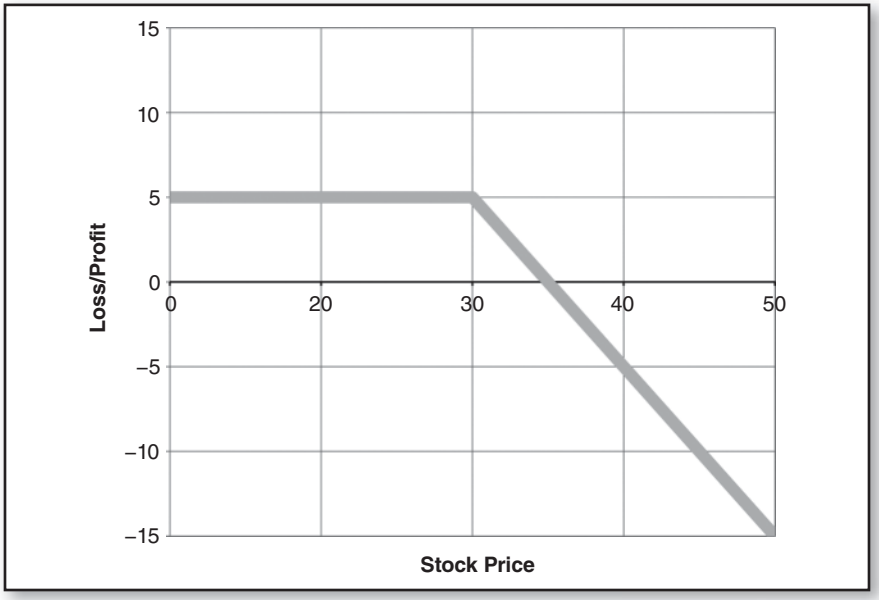

FIGURE 10.3 Short Call

Greeks of a Short Call

Delta	Delta is negative and the lower the strike price the closer the delta will be to –100. The delta will be between 0 and –100.
Gamma	Gamma is negative and will be highest when ATM and closest to expiration.
Vega	Vega is negative, indicating that decreased volatility is helpful to the position. Vega is always highest in the back months.
Rho	Rho is negative; increased interest rates increase value of call.

For example: AAPL is trading $700 and I am short the October 700 calls for $15. The most I can ever make is the amount at which I sold the calls. The most I can lose is unlimited as AAPL can move to infinity, making this a terrible risk-versus-reward setup.

Exiting Short Call Positions

Here are two scenarios of how to close out short call positions:

Scenario 1	Price of call decreases below breakeven. Before I make any trade, I will have one, two, or even three price targets. I can buy them for a profit or let them ride until expiration.
Scenario 2	Price of calls increases above breakeven. In this scenario your call will then be trading at a loss. In this case I could buy it at a loss, add to the position, or hold out until expiration.

Time Tip

Remember that the theta effect is most pronounced with 30 days or less until expiration. The closer it gets to expiration, the higher the gamma and theta. To take full advantage of this effect I often implement short option (spreads only) with less than 30 days left until expiration.

Short Puts

Selling puts naked, although a bullish strategy, is also very risky, albeit less so than selling calls naked. As depicted in Figure 10.4, your losses will accumulate as the stock price falls, but are capped because shares cannot go lower than zero. When you are selling puts you are essentially speculating that the

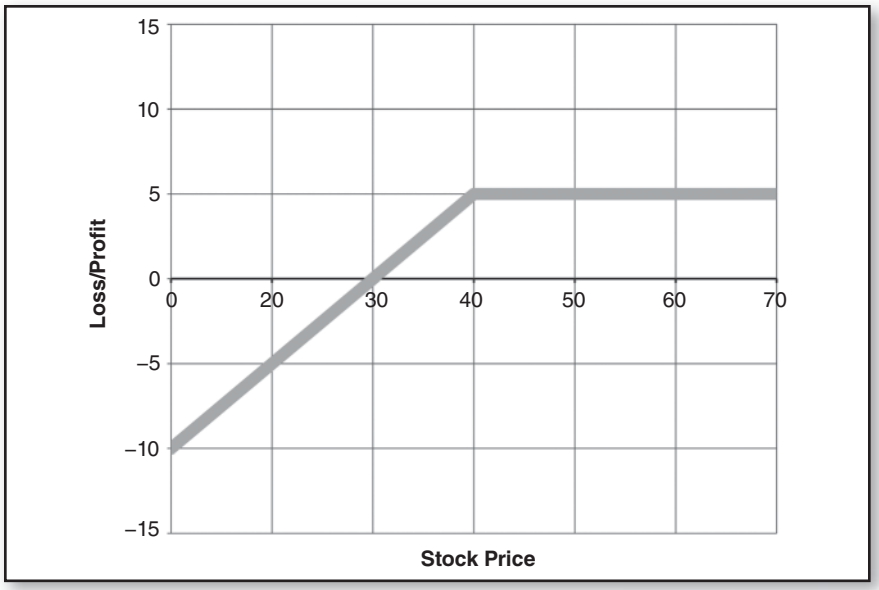

FIGURE 10.4 Short Put

stock will stay above the strike price that you sold until expiration, where you will keep the full credit received for sale of the put. If the stock price ends up below the strike price you sold, at expiration, chances are you will be assigned the stock. As a seller of the option, you do not have the choice as to whether you will be assigned on these puts or not. The buyer of the option always has the right (but not the obligation) to expire the put and/or call on the seller even if it is in-the-money.

Short Put Strategy

Outlook	Expectation that the stock will either stay flat or make a bullish move.
Trade	Sell a put option.
Advantages	Time decay is on your side. A decrease in implied volatility will help this position.
Disadvantages	Limited risk; short volatility.
Maximum risk	Limited; stocks can only go to zero.
Maximum reward	Capped to the credit you received from selling the put option.

Breakeven	Put strike price minus price of put sold.
Time decay effect	Theta is helpful to this position, eroding away the value of the puts as time passes.

Here are the Greeks relating to a short put option.

Greeks of a Short Put

Delta	The delta is positive and the higher the strike price the closer the delta will be to 100. The delta will be between 0 and 100.
Gamma	Gamma is negative and will be highest when ATM and closest to expiration.
Vega	Vega is negative, indicating that decreased volatility is helpful to the position. Vega is always highest in the back months.
Rho	Rho is positive; increased interest rates will help this position.

Exiting Short Put Positions

Here are two scenarios for closing out your short put positions:

Scenario 1	Price of puts decreases below breakeven. Before I make any trade, I will have one, two, or even three price targets. I can buy them for a profit or let them ride until expiration.
Scenario 2	Price of puts increases above breakeven. In this scenario your put will then be trading at a loss. In this case I could buy it at a loss, add to the position, or hold out until expiration.

Very similar to short calls, I am not a fan of selling naked puts. I am ever naked short puts, I will always buy puts as protection against my short puts.

Time Tip

I always try to sell puts with less than 30 days until expiration to take advantage of theta effect. The closer to expiration, the higher the gamma and theta, which means the higher the risk.

Keene's Trading Tip

I like to watch the unusual options activity and sell put spreads once I see a put seller. I always try to sell puts with a strike lower than the current stock price. This is because I make money whether the stock is flat, moves higher, or even moves lower, as long as it stays above my breakeven point.

Deeper Look at OTM Calls and Puts

When I look at the two strategies, buying out-of-the-money calls or buying out-of-the-money puts, I know I make more money on the bearish side. This means that if I buy puts, I am putting on a bearish trade and getting long volatility. If I buy calls, I am putting on a bullish trade and also getting long volatility. Often, when stock moves lower, I will make money on a put, because the bearish trade will be profitable and the long volatility will also be profitable. Most of the time, if the stock market decreases in value, volatility increases as uncertainty increases. If I buy calls, often I will make money as the calls will increase in value; but the volatility decreases in value, so I will lose money on volatility. This is one of the main reasons that I can trade better in a bearish stock market.

Is Risk versus Reward of the Option Trade Limited or Unlimited?

I always consider whether the risk versus reward of an options trading strategy is limited or unlimited. I never want to take a trade that has unlimited risk because I label that as "blowout risk." What this means is that when I am trading I consistently use risk-versus-reward setups to place trades. I never want to chance blowing out my entire account on one single trade.

I know my risk versus reward for each and every one of the trades I place. I often do not place trades where I am selling a $1 call spread for $.10, because that means I am risking $90 per one lot to only make $10. If I am selling a spread, I usually try to receive a credit of 30 percent of the spread width. I know I am comfortable buying calls and/or puts because this represents limited risk. When I sell calls, stocks in theory can move higher to infinity, so this is unlimited risk, thus not representing a good setup.

Where Is Breakeven on an Option Trade?

One of the biggest reasons traders lose money is that they do not define their risk-versus-reward setups properly. For every trade I put on, I have a predetermined profit target, a level where I will add to the position if I want, a level where I will take it off, and my risk-versus-reward setups. Many traders buy calls for $1 and the second they move to $1.20 they take off the position. However, they could also hold them until expiration when they might be worth zero. This strategy risks $100 per 1 lot only to make $20, not a favorable risk-versus-reward setup.

Questions

1. The long call strategy _____.
   - **a.** Makes money when implied volatility increases
   - **b.** Makes money when the stock goes up
   - **c.** Is a bullish strategy
   - **d.** All of the above
2. The advantage of the long call strategy is that it is much cheaper than buying the same underlying stock.
   - **a.** True
   - **b.** False
3. The time decay effect on the long call strategy is:
   - **a.** Negative because theta erodes with the passage of time
   - **b.** Not enough information is given to answer the question
   - **c.** Positive and increases in value as time goes on
   - **d.** Good for the long haul
4. One of the best money-making strategies is to buy a far out-of-the-money long call.
   - **a.** True
   - **b.** False
5. If you exit a long call above your breakeven point, then the trade will be profitable.
   - **a.** True
   - **b.** False
6. The long put strategy will have a _____ outlook.
   - **a.** Bullish
   - **b.** Bearish
   - **c.** Down-market strategy
   - **d.** Up-market strategy
   - **e.** Both b and c

Questions (*Continued*)

7. The risk of the long put strategy is limited to the entire cost paid for the put if it expires worthless.
   a. True
   b. False
8. A long put will be profitable when the stock is trading above your break-even price.
   a. True
   b. False
9. One of the best money-making strategies is to sell options naked.
   a. True
   b. False
   c. It is impossible to sell options naked because you are always hedged.
   d. There is not enough information to answer the question.
10. In general, when stocks go up in value, then the implied volatility of a long call strategy will go up in value as well.
    a. True
    b. False
11. In general, when stocks go down in value, then the implied volatility of a long put strategy will go up in value as well.
    a. True
    b. False

CHAPTER 11

Why Is Everyone Long Stock?

How to Use Options for a Hedge

As I watch all the equity options trades going across the tape for unusual options activity, I notice one common theme: It seems that many of these trades or traders are getting long stocks. There are many ways "paper" can get long. Let's define paper once again before we go forward. Paper is an order from a hedge fund, mutual fund, retail bank, or a *big* trader. Often, the number of calls outweighs the number of puts, and most often, calls that are being bought outweigh calls being sold. The reason for this is simple: Many hedge funds, mutual funds, and traders only know how to trade one way, and that is to the long side. Hedge funds run many different trading styles, but many of them are *long only*, because that is what their customers want and that is how the history of the stock market has been in order to perform. Almost every single person in the United States is long stocks in some form: 401(k) plans, mutual funds, IRAs, or even stock-purchase plans. Mutual funds are long a basket of stocks to provide average investors with a diversified portfolio. Throughout the history of the stock market, aside from the past 15 years, the market has moved in one direction: from the bottom left to the top right, a perfect way for any investor to make profits. However, recently it is more of an uphill battle, as the S&P 500 futures have only recently set new record highs. Since 1999, the stock market has been basically flat, but the price of living and inflation have increased dramatically (see Figure 11.1).

Keene on the Market: Trade to Win Using Unusual Options Activity, Volatility, and Earnings, Andrew Keene.

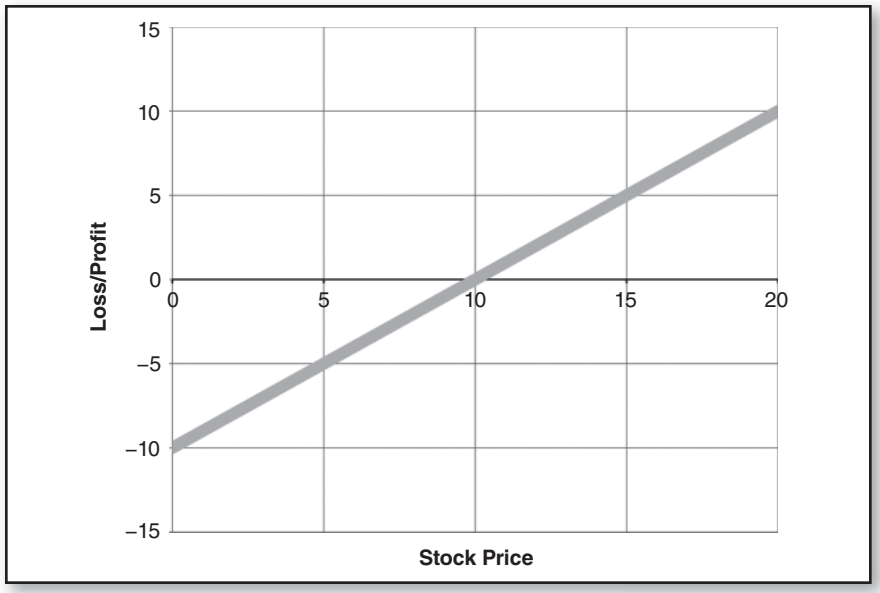

FIGURE 11.1 Long Stock

The American Dream

The American dream is the idea of ownership, and of taking a small amount of money and building it into a fortune. So many investors own stocks that they should not own and often they only sell them when they *have to* sell them, not when they have profits. I think of the stock market as going to Las Vegas. In Las Vegas, like many people, I only stop gambling when I run out of the money I brought. If I bring $1,500 and I win $2,000 right away I try to run it up to $5,000 or $10,000 and have the "Las Vegas Story." I never think about putting that initial $1,500 into my pocket and playing with the $2,000 until it is gone. No; most times I play until all $3,500 is gone. Now, imagine if Las Vegas implemented a mandatory insurance policy in every casino; no matter what, as soon as you lost all of the money you brought with you, you'd be completely cut off; surely this idea would be in most people's best interest (including mine). In spite of this, Vegas would *never* do anything of the sort, since it makes its money exploiting drunk people who are playing the tables improperly.

So, why not use options as insurance against stocks? Let's look at three ways to protect a long stock basket or portfolio.

I Have Insurance on Almost Everything

I have insurance against my home, car, health, jewelry, and business. These are all assets, so I want to protect them in case I have a fire at my home, or a car accident, or someone steals my watch. So, why would I not also want insurance if I were long a stock or basket of stocks? Stocks, like all the items I mentioned, are assets. I have a net worth: assets minus liabilities. My assets include anything that has any value if sold on the market. Even the couch in my living room would be considered an asset. I have never understood why so many people have insurance against all their assets *except* their stocks. Stocks not only are an asset, but of all the assets listed above they have the most volatility and move the most on a day-to-day basis. Is the price of my living room couch going to move on a day-to-day basis? No; but a stock or a basket of stocks will. Considering all the various options strategies, which is the best way to purchase insurance against my stock?

I could *buy a put* against my stock for insurance protection. A put is an option that gives me the right, but not the obligation, to sell stock at a certain price within a certain period of time. So, it would give me a way to sell the stock if I want, but I would get all the rewards to the upside. Very similar to insurance against my condo, if the condo goes up in value, I do not have to sell it, but if something bad happens to my condo, then I get money back, such as for fire, theft, or roof damage. I used to have dreams at night for many years, because I knew if DIS (Disney) went down 25 percent or more, I would lose around $75,000. So I would always have these dreams that Disney was trading lower. The reason was because I was short puts in Disney. I was giving another investor too much insurance against his portfolio and not enough for myself. If I am an investor in AAPL, and let's say that I was long 1,000 shares of stock at $525, then the stock's net asset value would be $525,000. AAPL has recently come down from $705 to $525, and if I was long 1,000 shares of stock, then the price of my assets would have gone down from $705,000 to $525,000 or 25 percent. However, if I was long the 600 puts and I had the right to sell stock at $600, it would have been easier for me to sleep at night. If AAPL continued lower, I could have sold the stock at $600; then if I wanted to get long the stock again at these levels, I could have saved huge amounts of money. What if there is a study tomorrow that says that the iPhone causes cancer? The stock could open at $350, so why would I not want to protect myself against potential huge losses in my assets?

Let's look at protection. I am long shares of the SPY and the stock is $136.50. If I look at a similar option that is 15 percent out-of-the-money, I can compare the implied volatilities. Let's say I want to be long the stock market or SPY for the next year, unless it drops by over 15 percent. I could buy the 115 SPY January puts for $5.50 as insurance against my long stock position. In this example, I would pay less than 4 percent of the stock price for 15 percent insurance to the downside. Once again, if I was long SPY stock and the puts, I would get all appreciation to the upside with (in theory) an unlimited reward.

The Famous Covered Call

Another way to get an extra dividend stream is with a *covered call* strategy. This is a very popular strategy among investors, because the retail trader will make extra money if the stock goes higher and the stock purchase price will be lower if the stock moves lower. This is the only strategy that the Options Clearing Corporation (OCC) has declared nonspeculative, which I find a little ironic as it often has a limited reward and a large risk involved. Let's say an investor likes MSFT as a stock at $26.50, which historically has been inexpensive with a very cheap price to earnings (P/E) ratio. An investor might think that MSFT could move to $30 in nine months, and if so he would sell it at $30. Rather than simply wait for shares to hit $30 prior to selling, this investor could sell covered calls to secure an additional revenue stream. This investor who was long stock in MSFT could sell the July call for $.75, making an additional $75 for every 100 shares of MSFT he owns. The term covered call means that he is selling the call and is covered with his long stock position.

With the 10-year government bond trading 1.8 percent, investors are looking at other ways to create a dividend stream. Let's break down this trade. An investor is long the stock and he is collecting $.75 or $75 per 1 lot against his 100 shares or $2,650 of stock. This means if the stock is exactly $26.50 in July next year the investor will collect 2.8 percent in profits in just eight months. Not a bad deal, and if the stock moves higher, he can make even more money. Let's first look at the downside. The reason a trader would make this trade is because he already thinks the stock is a good purchase at the current price. His breakeven to the downside is $26.50 minus $.75, or $25.75. So the stock can sell off another 2.8 percent to the breakeven, or he can look at it as getting a 2.8 percent discount. However, to the downside, all stock can go to zero, so the investor's downside risk is $2,575 per share. He is selling the right to someone else to buy MSFT between now and July

next year at the $30 strike for $75 per 1 lot. This means he will not be "called" away on his stock until $30, and for this option he is receiving that $75 in premium. The best-case scenario is that the stock ends up at $29.99 at July expiration next year. This means that the investor received his 2.8 percent return on the calls and made $3.49 or 13.2 percent of his stock that appreciated in value. So the total profit on this trade would be 16 percent in eight months—not bad returns at all. However, there are drawbacks to this trade.

Since the trader is selling a call, he does *not* have the unlimited reward he would have if he were long the stock outright. Let's say the stock surged to $50. This trader would have to sell his stock at $30, and so his rewards are limited. They are limited to *strike price of option* he sold plus *amount received for call* minus *purchase price of stock*.

Once again, the higher the implied volatility, the more a trader will be able to get for his covered call; but the higher implied volatility means more fear to the downside. Most likely, the stock has a high implied volatility because the historical volatility is much higher.

We've now learned that options are not always used as speculation. They can also be employed as a hedge against a stock position. The two previously discussed strategies are great ways to use options as insurance and protection, and not as bets or speculation. Foundations, pension funds, or investors can use options as protection against their long portfolios. Now, what would happen if we combined these two strategies together? (see Figures 11.2–11.4).

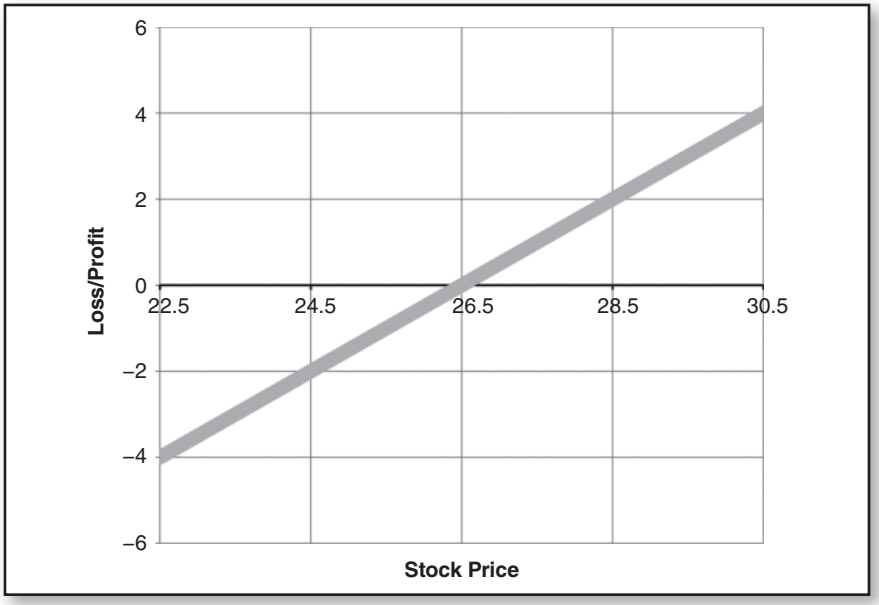

FIGURE 11.2 MSFT Stock

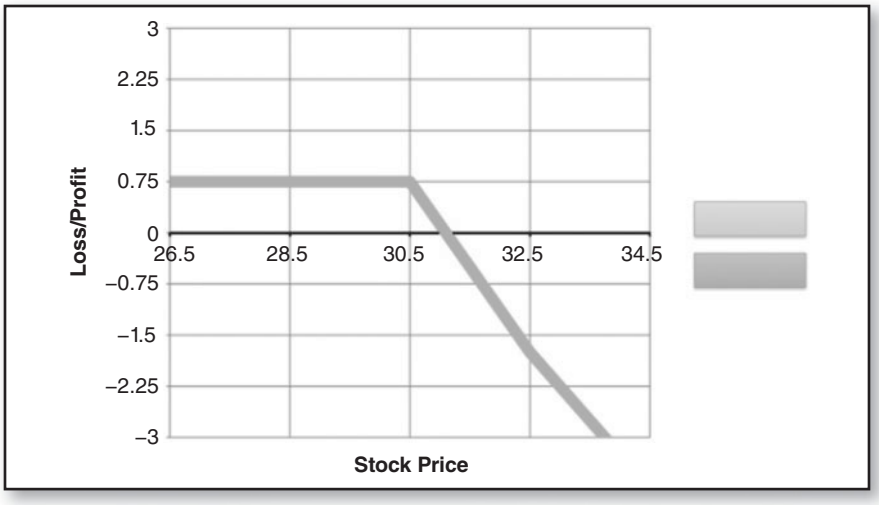

FIGURE 11.3 Short MFST July 30 Calls for $.75

FIGURE 11.4 MFST July 30 Covered Call

The Zero-Cost Collar

In my trading room I talk about options, trading, and the stock market for over four hours a day. I frequently discuss AAPL, with whom I've had a long, deeply involved relationship since 2006. For what it's worth, I was the biggest independent on-the-floor AAPL trader from 2006 to 2009. Sometimes it feels as though AAPL and I are dating. Truth be told, AAPL has "broken my heart" many times over the years. Nevertheless, I owe much of my success and wealth to this one special stock and it will always be close to my heart. AAPL blew out my account and almost my career the first time it gave "poor guidance," and the stock spiked from $90 to $99 only to drop back to $80. That was the $100,000 sting that broke my heart the first time. So, if I was long stock in AAPL, I would not want to buy puts as protection, the volatility is too high, but I think that a zero-cost collar would be perfect. This means that I could buy a downside put for protection and sell an upside call to offset the cost of my puts. It's the best of both worlds: I make money if the stock goes higher and I am protected to the downside if it moves lower. Let's look at an example with AAPL at $530.

Let's say I want to exit my position completely if AAPL shares begin to trade under $400, but I really think the stock will hit $685 next year. I could buy the January 400 puts for $28 and then sell the January 685 calls for $28. This would create a zero-cost collar because the credit received from the call I sold finances the cost of the put I purchased for a net credit/debit of $0. I can utilize a zero-cost collar in almost any stock that I own. So, in this trade I will be long AAPL from $530 to $400 to the downside and I have a stop at $400 to the downside. Then to the upside, I would once again be long AAPL, but have to sell my stock at $685. In this example, a zero-cost collar will give $130 in downside protection while capping my upside profits to $155. Not a bad bet if I could not handle the daily or weekly swings of AAPL but I believed in the story for the next year. If I was long 100 shares of stock and held this until expiration, I would lose $100 per $1 the stock sold off with a maximum loss of $13,000. To the upside, I would make $100 per $1 the stock moved higher with a maximum profit of $15,500. Notice on this trade I am not paying any premium for the options; the P&L of the collar and stock combined will look differently on a daily basis. However, if the zero-cost collar and stock positions were held until expiration and the stock expired between $400 and $685, both options would expire worthless, so I would just be left with my long stock (see Figures 11.5–11.8).

FIGURE 11.5 Long AAPL Stock

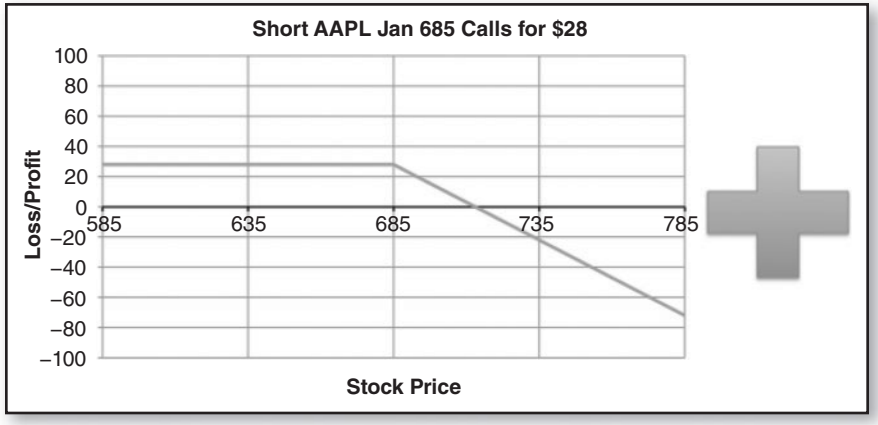

FIGURE 11.6 Short AAPL $685 Call

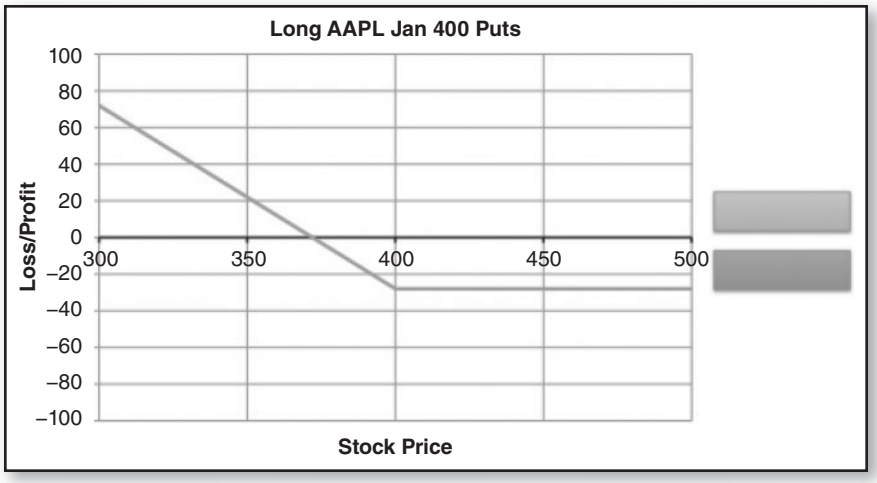

FIGURE 11.7 Long AAPL 400 Puts for $28

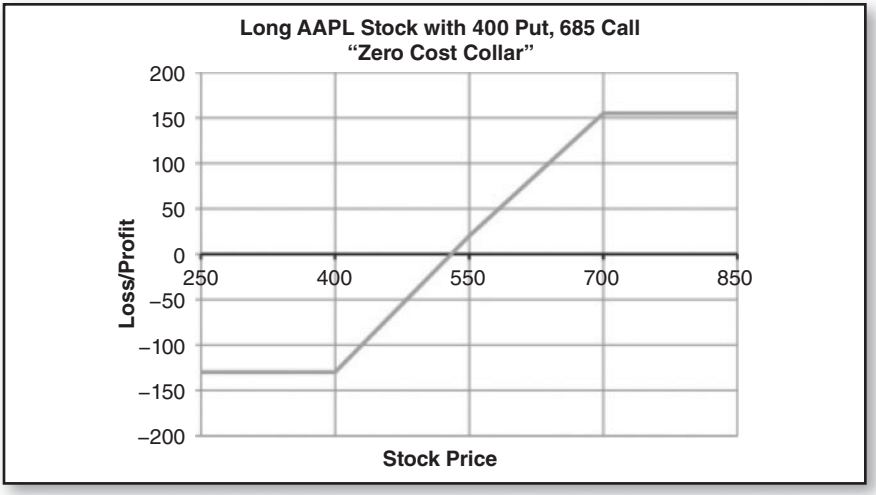

FIGURE 11.8 Zero Cost Collar with a Long Stock Position

Summary

These three strategies are a great way for a foundation, mutual fund, or individual investor to use options to hedge a long-only portfolio of positions. They are not speculative in any way; these strategies offer a means of asset protection and limit the loss potential from movement to the downside.

Much of this book is dedicated to trading strategy, but I wanted to show some examples of how options can be incorporated into an investment strategy as downside protection for a long stock or asset portfolio. One reason options have gotten a bad reputation in the industry is because many do not know how to use them properly. My purpose is to teach, educate, and assist in the evolution of options concepts away from being synonymous with speculation. Options can help investors manage and control losses so we can avoid the type of market fall-out seen in 2007.

Questions

1. Most people in the United States are long stocks in some form.
   a. True
   b. False
2. Trading options is like going to Las Vegas because:
   a. Obviously, there is a certain element of gambling to trading.
   b. There is a certain element of not knowing when to leave with your winnings.
   c. There is a certain element of stopping only when all of your money is gone.
   d. All of the above.
3. It is important to buy an insurance policy for all of your assets, including financial assets.
   a. True
   b. False
4. Buying insurance for a stock position can be done by _____.
   a. Doubling down on the position when the stock goes down
   b. You can't buy insurance for stocks
   c. Buying options
   d. None of the above
5. If a stock opens lower from the close of the day before, it is possible to lose money with _____.
   a. Short puts
   b. Short calls
   c. Short straddles
   d. All of the above

Questions (*Continued*)

6. If your overall position is going in one direction, you should:
   a. Go the opposite direction with options contracts.
   b. Do nothing; this is a sure way to win big in the market.
   c. Do nothing; you can only be one direction in the market at a time.
   d. None of the above.
7. Buying insurance against your position can be as easy as buying inexpensive puts.
   a. True
   b. False
8. It is possible to pay less than 4 percent of the stock price for up to 15 percent insurance to the downside of a position.
   a. True
   b. False
9. A zero-cost collar is when the cost of the _____.
   a. Puts is more than the cost of the calls
   b. Puts is less than the cost of the calls
   c. Puts is the same as the cost of the calls
   d. None of the above

CHAPTER 12

What Are Synthetic Options Positions?

A synthetic options position is when two or more trading instruments are combined to emulate another financial instrument. In this chapter, we will examine various ways this can be done.

Synthetic Long Stocks

Buying a call and selling a put with the same strike price and the same expiration date creates a synthetic long stock position. As the price of the stock increases, the call will rise in value and the put will fall. This total change in the prices of the call and put will mirror that of just owning the actual stock. The delta of this trade will be very close to 100. This position has the advantage of costing much less than owning actual stock. The disadvantage of this position is a limited life-span and, since it is *not* long stock, the owner of this combo will not benefit by receiving the dividend if there is one. If AAPL is trading $525 and I buy the December 525 calls for $25 and sell the December 525 puts for $25, I own this stock for $525, but would without the capital outlay of $52,500. The margin for the "combo" strategy would be the same margin of long $2,500 in calls and being short naked puts in AAPL. In figuring out this combo price, interest rate and dividend would be factored in as well. In general, if I quoted this trade with a floor broker, the market makers would

Keene on the Market: Trade to Win Using Unusual Options Activity, Volatility, and Earnings, Andrew Keene.

know the *cost of carry*, so in theory I would have to add that to the price of the combo to offset the borrow cost of the stock purchase from the brokerage firm.

The main reason that this trade will be done is if a stock has an extremely high, hard-to-borrow rate. Let's say that I wanted to get long stock XYZ and I knew that it cost $.50 for a trader who wanted to be short stock from now until expiration. This was the case for Groupon (GRPN) for a while, and for many more stocks, years ago. Say XYZ was trading $30 and I wanted to get long the stock, but I knew that short sellers are paying $.50 to borrow this stock from now until next expiration. I could trade a combo and get the stock at a discount, the same as buying the stock and collecting the $.50 refund to borrow the stock out. In this example, I could buy the XYZ December 29 calls for $1 and sell the December 29 puts for $.50, for a net total of $.50. So, with the stock trading at $30, I would be *synthetically* getting long the stock at $29.50. Using options works so well—even putting on positions through synthetics. These are *synthetic stock positions*. In what follows, I will tell you how I use synthetic calls and puts to better understand trading and risk versus reward.

When I was on the floor, brokers used to come in all the time with good trades, bad trades, pick-off paper, and berries. *Good trades* were trades that fit my position well; they were paying my offer or selling my bid. *Bad trades* were ones that were often midmarket, not taking my offer or selling my bid, or trading options in a weird stock out to 2016. Then there was *pick-off paper*—some brokers were famous for this. For example, if Facebook (FB) is trading $24 and a trader has to dump one million shares, why dump the stock if you can sell 10,000 deep in-the-money calls for a better price? So, a floor broker would offer us calls and, before we had a chance to sell our stock, the stock already moved against our trade $.20; thus the floor broker "picked us off" because we could not get our hedge and lost money on the trade. Then there were the *berries.* Some traders on the floor knew how to trade these. If a floor broker offered puts at $10 I could buy stock against the puts and create a synthetic call for $.10; I could then sell the calls for $.20 to someone else, "so theoretically" I locked in profits.

The key to synthetics is very simple: Be quicker at math than the guy next to you, know if and when the stock pays a dividend, and know the interest rate as dollar amount, not just as a percentage. When I first started trading I was paying 7.75 percent on long stock, but interest rates have since moved much lower.

Let's look at FB at $24 because the paper in Facebook is fast and fierce (see Figure 12.1). The biggest thing to realize is that as the stock moves, every

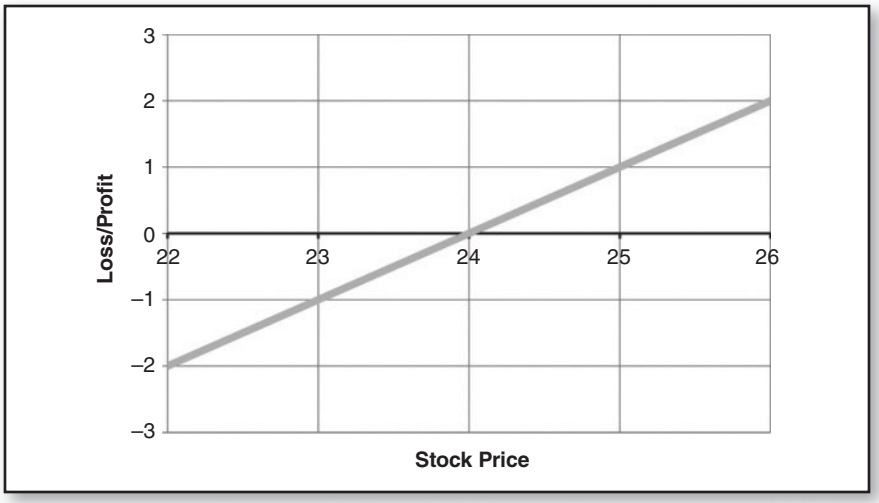

FIGURE 12.1 Long FB Stock at $24

single cent will affect the price on the synthetic. Often, when we had a floor broker working an order to sell 1,000 calls, I would then offer 10,000 shares of stock $.05 or $.10 higher than the current price. If I got filled, I would make a trade with the floor broker. Working an order in stock allowed me to pick up even more nickels in profits and those nickels would really add up. A hundred nickels is not $50; it is $500, because every option is 100 shares of stock.

Synthetic Long Stock = Long Call + Short Put

Facebook is trading $24 and, for this example, we will say that the dividend is zero and interest rate is zero (see Figures 12.2–12.4).

If I am long the December 24 calls for $.50 and short the December 24 puts for $.50, the synthetic is long stock in FB at $24. So, if FB is trading $24, I will not have any profit on this trade. If I can buy the December 24 calls for $.50 and sell the December 24 puts for $.50, and then stock, which is always moving, pops to $24.10, I can sell stock at $24.10 against my combo and lock in $.10 profits. I will still have some risk, because I will always have "pin" risk and commissions on trading 2 options and 100 shares of stock.* Let's say my

* Pin risk is defined as when the option lands right on a strike price that I am short. I am pinned, because I have no control if I will be assigned on the option or not, because the buyer of option controls the exercise rights.

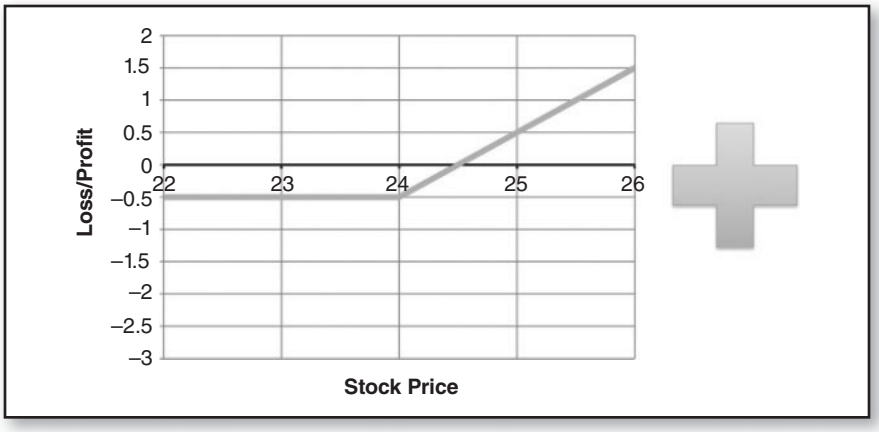

FIGURE 12.2 Long FB Dec 24 Calls for $.50

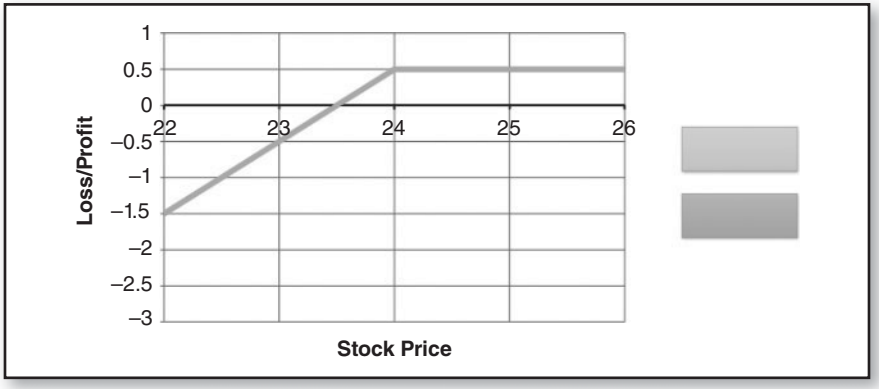

FIGURE 12.3 Short FB Dec 24 Puts for $.50

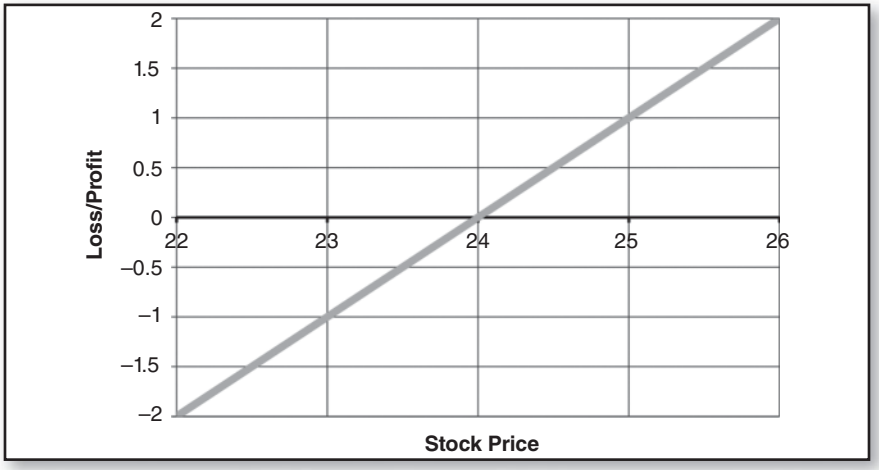

FIGURE 12.4 Long FB Stock at $24

commissions above are $.03 total: I really need stock to move to $24.03 to lock in a wash.

If I can buy the December 22 calls for $2.10 and sell the December 22 puts for $.10, I am *synthetically* buying stock at $24. If the stock is currently trading $24.13, I will do this all day because I am locking in $.10 profit: $24.13 > 22 calls + $2.10 – 22 puts $.10 = I sold *real* stock $24.13 = I bought *synthetic* stock through options at $24 + $.03 commissions, I get $24.13, I lay out $24.03 = $.10 profits. Every option is 100 shares of stock, 1 lot is $10 profit, and a 100 lot is $1,000 in my pocket. I sold actual stock instead of real stock. Since I am creating an arbitrage situation, every option is 100 shares.

Synthetic Short Stock = Short Call + Long Put

Facebook is trading $24 and, for this example, we will say that the dividend is zero and interest rate is zero (see Figures 12.5–12.7).

If I am short the December 24 calls for $.50 and long the December 24 puts for $.50, then the synthetic is short stock in FB at $24. So, if FB is trading $24, I will not have any profit on this trade. If I can sell the December 24 calls for $.50 and buy the December 24 puts for $.50, and then the stock, which is always moving, sells off to $23.90, I can buy stock at $23.90 against my combo and lock in $.10 profits. I will still have some risk, because I will always have pin risk and commissions on trading 2 options and 100 shares of

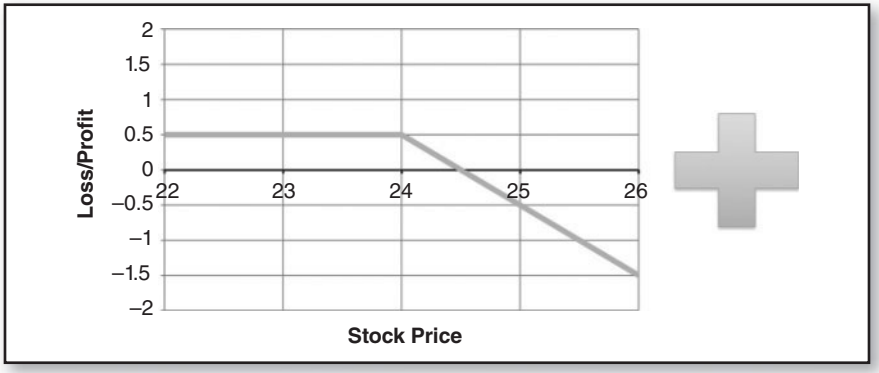

FIGURE 12.5 Short FB Dec 24 Calls for $.50

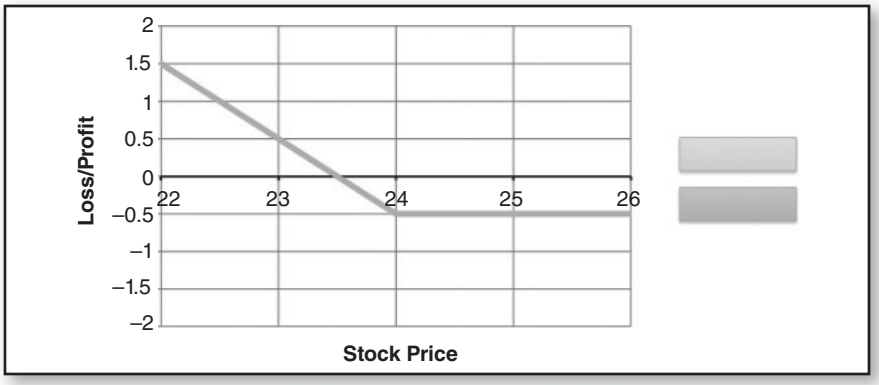

FIGURE 12.6 Long FB Dec 24 Puts for $.50

stock. Let's say my commissions above are $.03 total: I really need stock to move to $23.97 to lock in a wash.

So, if I can buy the December 26 puts for $2.10 and sell the December 26 calls for $.10 with stock trading $23.87, I will do this all day because I'm locking in $.10 profit: $23.87 < 26 puts – $2.10 + 26 calls $.10 = I bought *real* stock at $23.87 and sold *synthetic* stock through options $24 + $.03 commissions, I get $23.97, I lay out $24.00 = $.10 profits. Every option is 100 shares of stock, 1 lot is $10 profit, and a 100 lot is $1,000 in my pocket.

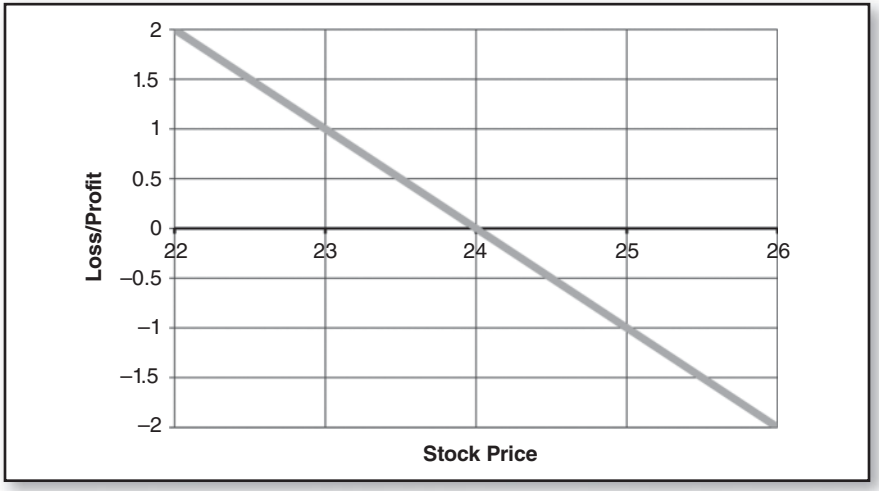

FIGURE 12.7 Short FB Stock at $24

The Goal of Making Synthetics

The goal of making synthetics is to always find out how much the out-of-the-money option is costing me. If a floor broker was trading out-of-the-money options, I would have to determine if I thought the options were a good trade or not. How do I know if a $10 deep-in-the-money call or $20 deep-in-the-money put is a good trade? I use the synthetic and always convert it to the out-of-the-money option.

Synthetic Long Call = Long Stock + Long Put – Strike Price

Paper is selling the January 28 puts for $4.50. Dividends and interest rates are both zero.

Synthetic long call = (Long stock) $24 + $4.50
(Long put) – ($28) Strike price

Synthetic long call = $24 + $4.50 – $28 = $.50

Synthetic long call = $.50

If I looked at the call market and it is $.40–$45, and I could buy the calls for $.05 less without buying the puts and stock, then I would not make this trade. If the calls were trading $.60, I could buy the puts, buy stock, and then sell the calls for $.60, locking in $.10 profits. I should also understand that if I am long stock until January, I will incur interest rate and dividend risk.

I have to trade the paper in front of me, not what I would like the paper to be. If I wanted to buy these calls for $.50 and the call market was $.50, I could *synthetically* buy them through puts for $.50, because paper is selling puts, not calls.

We will go over this more in the *OCRRBTT* Trading Plan in later chapters, but let's look at an example for a synthetic long call (see Figures 12.8–12.10). This happened to me in ARRY, a small, rarely traded biotech stock. Paper (an order from a hedge fund, mutual fund, retail bank or big trader) came in and sold 7,000 June 2.5 puts for $.35 when stock was trading $2.72. So, if paper sells puts through the *OCRRBTT* Trading Plan, I know I want to get long, but I looked and the market on the June 2.5 calls was $.50–$.85. I knew I wanted to buy calls, but how could I do this? I did my synthetic.

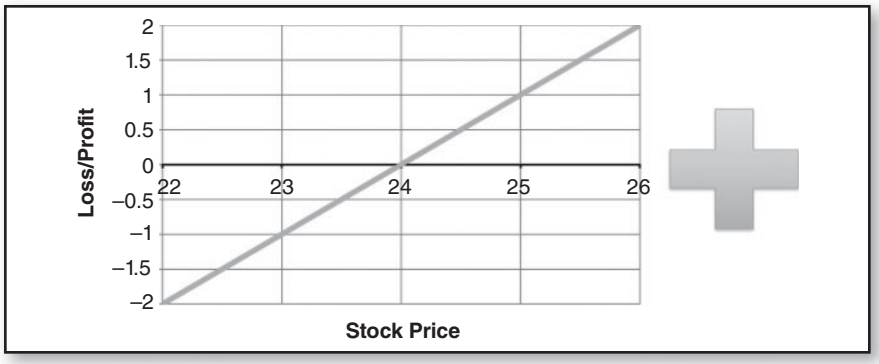

FIGURE 12.8 Long FB Stock at $24

FIGURE 12.9 Long FB Jan 28 Puts for $4.50

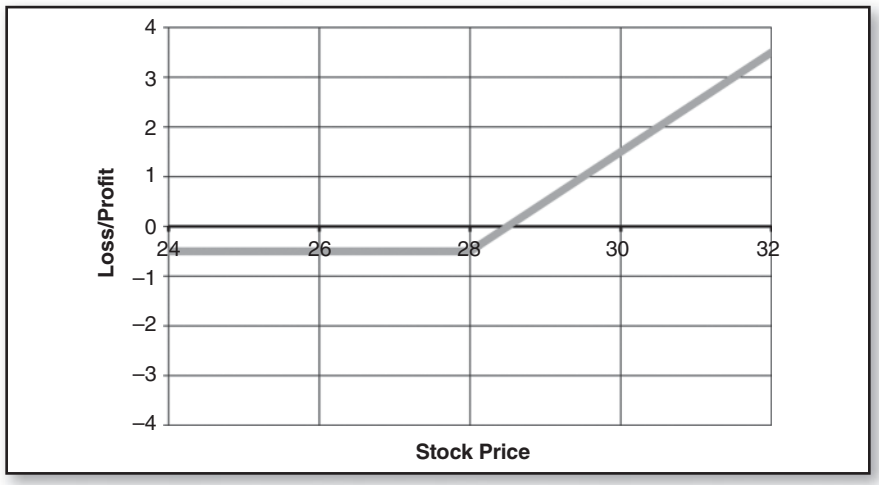

FIGURE 12.10 Long FB Jan 28 Calls for $.50

I bought the June 2.5 puts for $.35 + bought stock $2.72 – strike $2.50 = $.57.

I was synthetically long the June 2.5 calls for $.57 even though there was *no* volume traded on the June 2.5 calls. Stock moved higher and I took profits at 150 percent. That is a great way to use synthetics.

Let's look at some charts when FB is trading $24.

Synthetic Short Call = Short Stock + Short Put – Strike Price

This is a strategy that I do not employ because it is a blowout risk (see Figures 12.11–12.13).

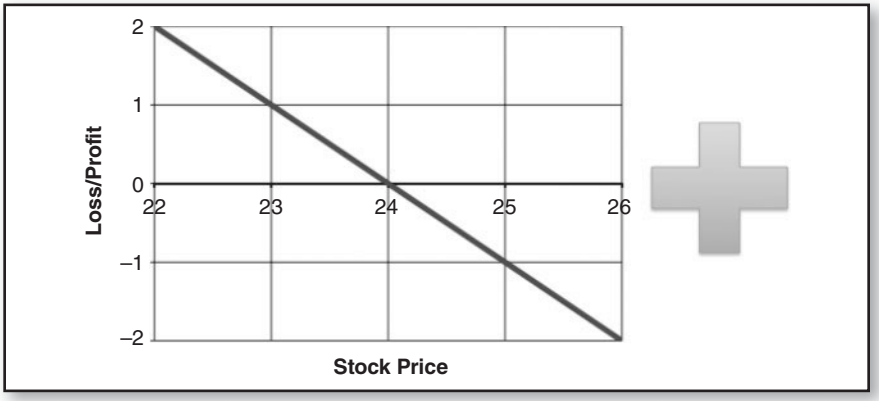

FIGURE 12.11 Short FB Stock at $24

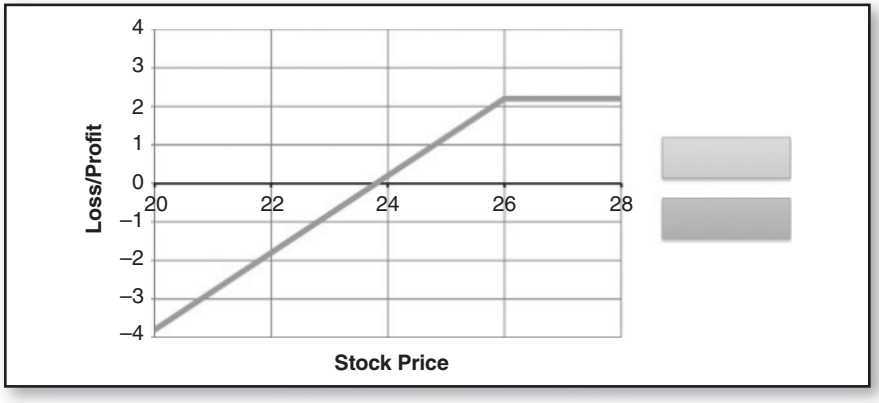

FIGURE 12.12 Short FB Dec 26 Puts for $2.20

FIGURE 12.13 Short FB Dec 26 Calls for $.20

Stock is trading $24 and the December 26 puts are trading $2.20:

Synthetic short call = Short stock ($24) + Short put ($2.20) – Strike price ($26)

Synthetic short call = $24 + $2.20 – $26 = $.20

If the market on the calls is at $.05, then I could sell the calls for $.20 through the synthetic and I would be locking in $.15 profit.

Synthetic Long Put = Long Call + Strike Price – Short Stock Price

These were the trades that usually worked out the best for me (see Figures 12.14–12.16). The reason is that generally there are more calls trading than puts, because traders usually have an upside bias. Oftentimes the insiders would sell calls against their stock position because their stock was "locked up." This means that they have restricted stock and cannot sell it for a period of time. Insiders would sell calls instead of buying puts, because puts get a bad reputation as being very bearish.

Facebook is trading $24 and I can buy the FB $19 calls for $5:

Synthetic long puts = Long call ($5) + Strike price ($19) – Stock strike ($24)

Synthetic long puts = $5 + $19 – $24 = zero or free

FIGURE 12.14 Long FB Dec 19 Calls for $5.00

FIGURE 12.15 Short FB Stock for $24.00

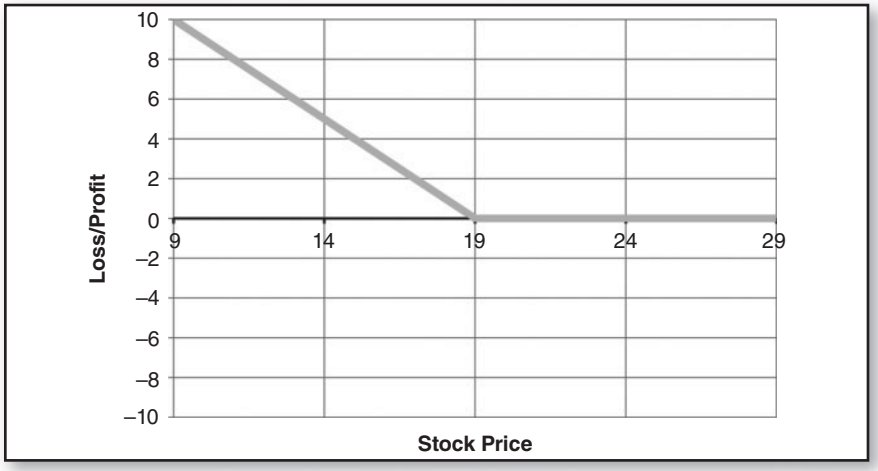

FIGURE 12.16 Long FB Dec 19 Puts for $0

This is when I would have Johnny "back up" the truck; free puts is the "Holy Grail." Yes, I would have to pay commissions on this trade, but so many times in my career, paying the commissions for these puts that other traders thought were worthless ended up making me tons of money. This is an example of a berry. Will FB trade to $19 by December? Who knows, but if the puts go to $.10 (which is very common) I will earn more than enough money to pay off the commissions on this trade.

Synthetic Short Put = Short Call + Strike Price – Long Stock Price

These are the trades I would take only if I could cover the price of the cheap put right off the bat (see Figures 12.17–12.19). As one of the partners used to say, "This firm was not built on selling cheap puts." Sometimes, I would not even sell these puts naked for $.10 with two hours left in the day. Since I was trading during 2007 and 2008, I watched the ways that naked puts could explode in a trader's account like sticks of dynamite.

Facebook is trading $24 and I can sell the weekly FB $14 calls for $10.10:

$$\text{Synthetic short puts} = \text{Short call (\$10.10)} + \text{Strike price (\$14)} - \text{Stock strike (\$24)}$$

$$\text{Synthetic short puts} = \$10.10 + \$14 - \$24 = \$.10 \text{ credit}$$

If I could make a quick nickel, I would take these positions off right away, for the reasons I mentioned earlier.

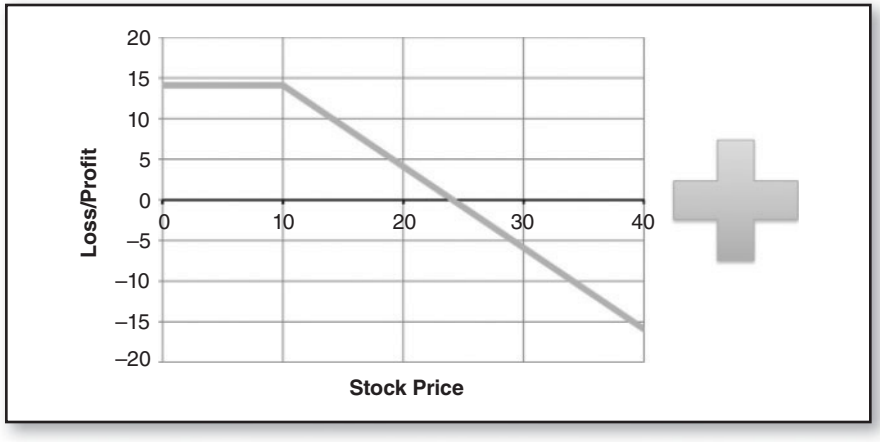

FIGURE 12.17 Short FB Dec 14 Calls for $10.10

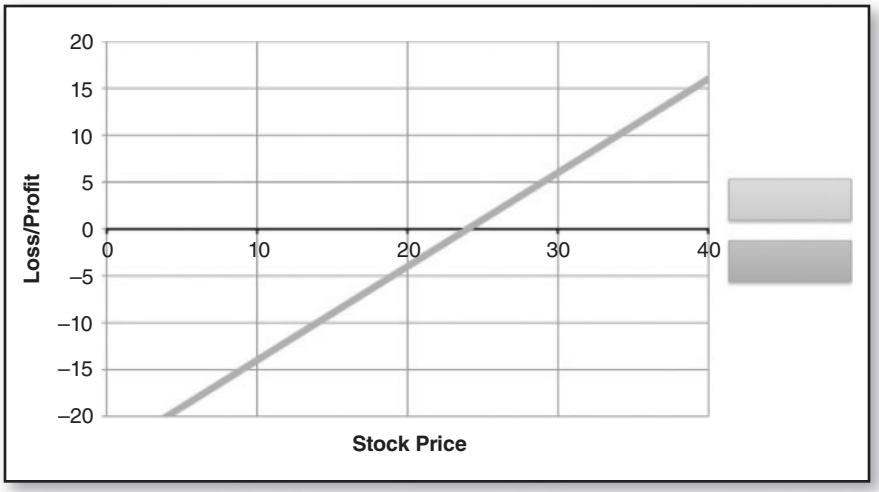

FIGURE 12.18 Long FB Dec Stock for $24.00

When you package up individual option and stock positions, these can synthetically create altered and sometimes more favorable risk-versus-reward overall positions. Depending on how the underlying stock is behaving versus how the trader initially thought it would, a more advanced trader can adjust an initial position to be more favorable depending on the current price action. For example: With a synthetic long stock position, if the stock goes up, you can buy back your short puts for a profit and remain long calls.

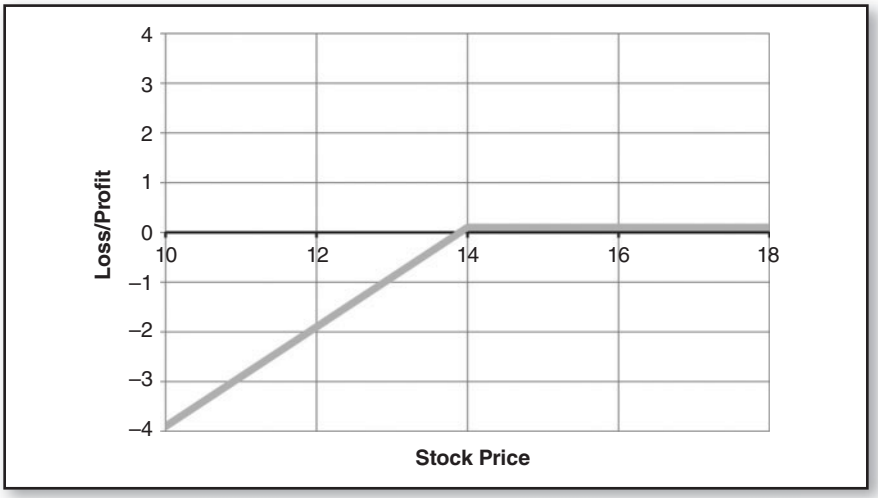

FIGURE 12.19 Short FB Dec 14 Puts for $.10

We must not forget to consider that for all these positions, we have assumed the dividends and interest rates to be zero. Calls will decrease with a dividend and increase with an interest rate increase. Puts will increase with a dividend and decrease with an interest rate increase. Always knowing dividends and interest rates is very important for synthetics. Also, be careful if the dividend date has not yet been announced. Some special dividends and interest rates will affect the synthetics as well.

During my days on the trading floor, we were taught to know what our interest rate risk was, but not to be too concerned about it. One day I was short 200,000 rho, which for a market maker is a huge amount. This means that from a 1-point interest rate decrease I would profit $200,000, but a 1-point decrease would result in a loss of $200,000. How did this occur? Simple. I was always short LEAP calls in GE. For more than two-and-a-half years I was long 5,000 deltas in GE and short 5,000 gamma. When the stock would go lower, I would sell more calls, and when it would move higher, I would buy more stock. I was having an average day, up around $7,000. Then, all of a sudden, the Fed came out and said they would increase interest rates one-quarter of a basis point. Now, my P&L said I was down about $53,000. I was almost in tears. My backer came to the pit and asked, "What's going on with your position? Did you put a bad trade into the system? Is something wrong with one of the stocks?" I was down $50,000 and I had no idea why. I have had some bad days, but I've always known and understood why and how I lost money. He said, "Hand me your plots. You are long two hundred thousand rho, that's why." So, I have learned my rho lesson: Always know what your position is.

Questions

1. What are synthetic options positions?
   a. Options that are paper
   b. Two or more trading instruments viewed together to emulate another instrument
   c. Options that are traded in a demo account
   d. a and c
2. Synthetic long stock positions are created by buying a call and selling a put with the same strike price and the same expiration date.
   a. True
   b. False

Questions (*Continued*)

3. The *cost of carry* is the _____.
   a. Brokerage fees that are charged to the trade
   b. Interest rate that is charged to the trade
   c. Time in the trade
   d. None of above
4. A synthetic short stock = short call + long put at the same strike in the same expiration.
   a. True
   b. False
5. The key to making a synthetic is to always find out how much the _____ option is costing you.
   a. Deep-in-the-money call
   b. Deep-in-the-money put
   c. Out-of-the-money call
   d. Out-of-the-money put
   e. Both c and d
6. A synthetic short call = short stock + short put – _____.
   a. Strike price
   b. Brokerage costs
   c. Interest rates
   d. Carry costs
7. A synthetic long put = long call + strike price – _____.
   a. Short stock price
   b. Brokerage costs
   c. Strike price
   d. Carry costs
8. A synthetic short put = short call + _____ – long stock price.
   a. Short stock price
   b. Brokerage costs
   c. Strike price
   d. Carry costs
9. Knowing what the interest rate risk is with your trades is key to keeping risk under control.
   a. True
   b. False
10. The price of a dividend affects the price of calls and puts.
    a. True
    b. False

(*Continued*)

Questions (*Continued*)

11. Which of these elements does *not* affect an option's price?

- **a.** Dividend
- **b.** Cost of carry
- **c.** Interest rate
- **d.** Implied volatility
- **e.** Number of employees

12. In theory, which one of the following complex options strategies is the riskiest?

- **a.** Long call
- **b.** Long put
- **c.** Short put
- **d.** Short call

CHAPTER 13

What Is Volatility and How Does It Affect Options?

Any financial dictionary defines volatility as "a measure for variation of price of a financial instrument over a period of time." A trader can look at historical volatility through many different timeframes: 10 days, 100 days, 1 year, or even 5 years. I'd like to take this definition one step further by saying that implied volatility, when looked at through the lens of options prices, is a measure of how much the market is expecting the underlying stock to move in either direction within a certain timeframe. In this chapter I discuss how historical and implied volatility affect options prices.

Basics of Volatility and Options Trading

Volatility is a very important part of options trading, so it is essential to cover it in depth. This is because small changes in the *implied* volatility can significantly impact the option's price. Volatility is a key component to understand because a trader can make or lose money on an options trade even if the stock does not move.

Here is the interview question that a seasoned trader would ask a potential trader:

> XYZ is trading $100 and I am long the XYZ $100 straddle for $10. If one week passes and the stock has not moved at all in that week, how

Keene on the Market: Trade to Win Using Unusual Options Activity, Volatility, and Earnings, Andrew Keene.

much would the straddle would be worth? Is it possible that I could have made money on my trade?

Most would say "No, the straddle should have decayed in value. That is true, but if the *implied* volatility had gone from 20 to 40 on a possible drug announcement, the price of the straddle would have doubled from $10 to $20 as well. So, implied volatility is the hardest element of the pricing model to grasp, because it changes so much on a minute-to-minute basis as well as on a daily basis.

Let's look at the two types of volatility used in options pricing: historical and implied.

Historical Volatility

Historical volatility is a measure of volatility expressed as an average over a given time period. This takes into consideration only how much volatility has moved in the past and does not extend to what volatility will do in the future. We can look at the historical volatility at many different levels, but on the floor I would generally look at the 20-day historical volatility. This is because the weekend is not taken into account in calculating historical volatility because stock is not trading during this time; hence the 20 day is a good gauge of how much the stock has moved over the past month. I still believe that no other window—either longer or shorter—is as good of an indicator.

Implied Volatility

Implied volatility enters in when expectations change for how much the market is forecasting a stock will move. Implied volatility in theory is also a supply-versus-demand curve of the difference between how much a trader is willing to pay for an option and how much a trader is willing to sell it for. *Anything* in this world is worth the difference between how much someone is willing to pay for something versus how much another is willing to sell it for. The easiest example is bottled water, which is a finite good. At the grocery store, I can get 24 bottles for $5, which is a fair price. If I am out running errands and I need to buy a cold one from someone selling them in the middle of the street, then I would now pay $1 for that same bottled water. If I am at the gym and thirsty, I would probably now pay $2 for that cold bottle of water. Now, I am

at the Cubs game and I want a bottle of water between beers, so now I might pay $5 for that same bottled water that I could have bought in the store for less than $.25 each. In options, there are many variables that determine implied volatility, the supply-versus-demand curve of those options. The events or catalysts listed here are the most frequent causes of these expectation changes:

- **Earnings announcements.** The implied volatility right before earnings announcements is always high, as it helps predict future stock price. Volatility gets crushed once the announcements are complete, since the fear or uncertainty is no longer there.
- **Unexpected news (bad/good).** This is often hard to predict, but many times you can see it in the price of the implied volatility. If there is a rush of implied volatility buyers, then they are expecting a bigger movement in the stock.
- **FDA decisions.** I have seen a stock's implied volatility get up to 500 percent. I have seen a stock with a $7 at-the-money straddle with the stock at $7.50 move more than that amount. FDA decisions are usually make-it-or-break-it and the implied volatility gets smashed.
- **Expiration dates.** The day before expiration, the at-the-money straddle can be one of the hardest things to trade. If GOOG at-the-money straddle for one day is $7, it could be worth $2, $7, or even $15. It's more or less a crapshoot.
- **Monetary or fiscal policy announcements.** I look at the SPY weekly straddle a couple of times a day to get a gage of how much Goldman Sachs or Citadel thinks the SPY and S&P 500 futures will move by the end of the week. They can be wrong, but it is amazing how good they are.
- **"Acts of God" (hurricanes, floods, storms, earthquakes).** These are hard to predict, but are usually factored into implied volatility.
- **Economics number announcement.** Similar to monetary or fiscal announcements.
- **Analyst up-/downgrades.** These are almost as unpredictable as the weather, but are usually factored into implied volatility.

Volatility analysis can help determine whether an option is currently overvalued or undervalued by comparing the theoretical price of the option to the current price and to past statistics of implied volatility.

When I was on the trading floor, I used to look at the 20-day historical volatility versus the 20-day implied volatility. If there was no pending news, earnings report, or other announcement, I tended to be a buyer of implied volatility when the 20-day historical volatility was greater than the 20-day implied volatility. I would then be a seller of the 20-day implied volatility when it was trading at a premium to the 20-day historical volatility.

In the trading pit, we used to have a buyer of the AKS (AK Steel) ATM straddles every Friday because he expected a takeover bid over the weekend. If there were no announcements, I would buy it back on Monday for less money. This is a great way of noticing a trend and then taking advantage of high implied volatility.

A lesson learned from the floor is that in the near-term, high implied volatility can go higher and low volatility can go lower. We saw the VIX spike to almost 90 in 2008; fortunately, I was a buyer of volatility the whole way up. During the period between 1991 and the end of 1996, the VIX traded around 12 but never spiked above 20. Then in June 2007, the VIX once again spiked above 20 for the first time in four years. This time you could see the panic in the traders' eyes. This was not a one-day or even weekly event that moves away. I thought the CBOE's VIX would move higher and started to buy implied volatility as I could tell it was moving higher almost every single day. Very similar to the trend being my friend in the stock market, the volatility would go up by the day. Also, in 2007 and 2008 when the banking crisis was in full swing, sometimes we would have a stock with an at-the-money straddle that looked too expensive, but the stock would move that price almost daily. If XYZ was trading $30 and the December 30 straddle was $5, it would not matter what the implied volatility was if the stock moved daily from $27 and to $33 and then back to $27 on a daily basis. I could make money on my gamma because the stock was moving so much regardless of how high the implied volatility was. So, buying implied volatility was making money; anyone who was selling it would have to go through the "short gamma" swings of stocks moving higher and lower and watching himself sell cheap implied volatility only to buy it back for a higher price instantly.

Even though volatility is seen to be *mean reverting* (meaning that the price will revert to the mean of the price spectrum), this normally happens only in the medium to long term. In the short term, volatility fluctuation can be quite violent and it takes time for the market to digest before moving back toward its long-term mean. Take into consideration that I was trading on the floor with $20,000/day P&L swings when the S&P 500 futures hit 666 and

the VIX spiked up to 89.53. I don't know that I'll ever see the VIX spike up to 80 again in my lifetime or the S&P 500 futures trade down to the "devil's level" of 666.

I watched this Unusual Options Activity order flow in AAPL and created the *OCRRBTT* Trading Plan from 11 years of experience on the trading floor. Once a week we had a broker from Merrill Lynch come and sell about 10,000 AAPL put spreads. When this trader sold these put spreads, he was doing two things: getting long deltas and getting short implied volatility. So, I would follow his attack. I knew if AAPL was $75 and this trader was short the 70–60 put spread any time AAPL was going to get into the long 70s, I was a buyer of the stock because this trader had to buy 1,000,000 shares of stock between $60–$70 if his short puts were in-the-money and long puts expired worthless. He eventually started getting in a little over his head, and one day, in the glooms of 2007, since he was short too many puts he had to buy back around 20,000 LEAP puts and he paid top tick for them. I do not know in the long run if he made money or not, but after he liquidated, he never came back. This was one way I used *reading order flow* to put on a trade.

Another acquaintance traded in the POT (Potash) pit and noticed a similar pattern. Every time paper would bid puts in POT, that stock would go lower. Paper is just an order from a hedge fund, mutual fund, retail bank, or *big* trader. He played it a different way, and whenever paper came in and was trying to purchase puts, he would not purchase them with paper; he would just sell 10,000 shares of stock naked. Sounds crazy, but over the next year-and-a-half it was amazing how much he made from just being able to read paper. Was it that easy on the trading floors? No, but the best trader could distinguish the good paper from the bad. This is an acquired skill that is much too complicated to describe in two paragraphs.

Volatility Is a Trader's Best Friend

In theory, I do not care if the stock market is up 500 points or down 500 points, as long as there is movement. Some of the best days in my trading career have been when the stock market was down 500 points, rallied back 300 points, and went down another 200. For a trader, movement creates opportunity, and lack of movement means that a trader can get chopped up in commissions—and commissions are the enemy. Even in August 2011, when the Dow Jones Industrials had four trading days, it moved 500 points

a day; this was great, because it created opportunities. I have rarely heard a trader say that he had a great day trading when there was no movement in the stock market.

I've discovered that these "bad-news" days are actually *good* news for the options trader! In fact, I have made more money on bad-news days than I have on good-news days and I look for setups during those times. Knowing whether the days are bad goes beyond whether the market is going down or not. One of the biggest monitors of the degree to which the market environment is good or bad is the *CBOE's VIX index*. I continue to tell traders that the CBOE'S VIX is the greatest product that 95 percent of people do not understand.

CBOE'S VIX Index

The VIX is a trademarked ticker image for the Chicago Board Options Exchange Market Volatility Index, a relatively newly created measure of the implied volatility of the S&P 500. Often called the *fear index*, the VIX can be used as a measure of the S&P 500's volatility for the next 30 trading days.

The VIX index can be thought of as a volatility record and can be used to get a quick bird's-eye view of market sentiment. If, for example, the news in the economy and the trading world in general is good, the VIX will be at a low number, which is indicative of a low stress level of the market. On the other hand, if the news in the market is bad, and there is a nervousness among investors and traders in the market, then the VIX index will move higher during the trading day and will show an increase in value as measured in percentage "gains."

Another way to look at CBOE's VIX is the supply-and-demand curve of the implied volatility in the S&P 500 futures options. We have learned in this book that, in general, when the stock market goes higher, then the implied volatility goes lower. The reason for this is most traders are long the market and they sell *covered calls* against their long position. If there are more sellers of options than buyers, the implied volatility must move lower in order to attract more buyers at a lower level. When do most traders protect a long stock position? The answer is, not when they *can*, but when they have to. So, as the stock market moves lower, more traders and investors buy puts to protect against their long positions. So, when there are more buyers than sellers for puts or implied volatility, then the implied volatility must increase in order to attract more sellers.

CBOE's VIX: More Than a Fear Indicator

So, yes, the CBOE's VIX is the fear indicator, but it is also a supply-and-demand curve of the options in the S&P 500 futures. Hence, if the stock market is down 500 points and there is a huge seller of downside puts, it is possible to have the VIX lower even with the stock market lower. Therefore, I would not think of the CBOE's VIX as a fear indicator so much, but more as a supply-and-demand curve for options.

These "gains" upward are not a measure of money or value; rather they are a measure of the increased volatility of the S&P 500 futures in the marketplace. The VIX index is just that: a measure of the volatility of the market as a whole as measured by the volatility of S&P 500 future options.

The number of the VIX index is *not* a dollar amount! When the VIX moved from 15 to 17 it did not go up $2! It moved up a percentage, 13 percent, or 2/15 = 13 percent of its previous value. On one hand, the VIX index is not a dollar amount. On the other hand, it is possible to use the VIX to help make money. It is even possible to trade the VIX index as a hedge against other positions that you may have on the books.

Why is the VIX the most interesting product that most people do not understand? The VIX has a spot price and then future prices. So, the number that we see on CNBC as the spot price is not a tradable amount. Most people look at the spot number, but that should not matter at all, because no one can buy or sell that number. It is more important to look at the front-month future. So, there is a spot price where that shows the implied volatility today, not tradable, and then the front-month future is where the traders are implying the implied volatility will be within 30 days of the last expiration. Then there are more future prices that are showing us where traders are implying the implied volatility will be at some future time.

Contango versus Backwardation

Two very important things to look at are *contango* and *backwardation*. Contango is when the VIX futures are trading at a premium to the current price. If the current price is trading lower, this indicates that the options market is expecting a greater movement in the future than in the current day. Furthermore, this illustrates that fear is more in the future and expectations are higher in the future than at the current day.

If the VIX is trading in backwardation, then the CBOE's VIX is showing us that the expectation of movement is higher today than in the future. When

the world looked like it was coming to an end in 2007, the VIX was trading in backwardation and the implied volatility on a daily basis was trading at a higher level than the futures. Note that the current price and the front-month future must meet at expiration. So, if the current price is $15 and the front-month future is $17, then the current price must move higher or the future must move lower, or a combination of the two. Using backwardation and contango can provide us a good indication of the fear or supply-versus-demand curve and what the market is implying today and in the future. Does it always work? Obviously not; no algorithm or theory ever works 100 percent of the time.

The Chicago Board Options Exchange measures the intraday levels of the VIX. The VIX is made up of a weighted average of the S&P index options that are listed on the exchange. Basically, the VIX measures the volatility of the market, which then indicates the fear of the market. Interpreting the VIX intuitively can be easy: The bigger the number, the more fear in the market. Interpreting it mathematically it works out like this: If the VIX is 15, this represents 15 percent implied volatility over the next 30 days. Carrying the math further, an options trader can assume a 68 percent probability (one standard deviation) that the S&P 500 will move up or down within 15 percent/$\sqrt{12}$ = 4.33 percent over the next 30-trading-day timeframe. This can be used to calculate the movement in many different time periods, including daily, weekly, monthly, or, of course, yearly.

Questions

1. Volatility can be defined as a measure of variation of the price of a financial instrument over a period of time.
   a. True
   b. False
2. Implied volatility is a measure through an options price of how much the market _____ the underlying stock to move within a certain period of time.
   a. Is pushing
   b. Is forcing
   c. Has expected
   d. Is expecting
3. Implied volatility in theory is also a supply-versus-demand curve of the difference between how much a trader is willing to pay for an option and how much a trader is willing to hedge it for.
   a. True
   b. False

Questions

4. The implied volatility right before a stock's earnings announcement is always high because:
   a. There is an uncertainty factor.
   b. There is a certainty to the earnings announcement.
   c. Earnings is unknown and is tied to the value of how much the stock will move after the announcement.
   d. a and c
   e. None of the above
5. Expectations in the price of a stock are affected by this event:
   a. Unexpected news (good or bad)
   b. FDA decisions
   c. Expiration dates
   d. Monetary policy announcements
   e. All of the above
6. Analyst upgrades/downgrades affect the price of a stock and are easy to predict.
   a. True
   b. False
7. The CBOE's VIX is a measure of market volatility and is usually measured in the 100–200 range.
   a. True
   b. False

CHAPTER 14

Various Uses of Options and Why I Love to Trade Them

Leverage

Options give you leverage and the ability to control larger amounts of stock with less capital. If AAPL is trading at $600 and I buy 100 shares of stock, it costs me $60,000 — that is a *lot* of money. However, I could buy the October 500 calls for $100. This would get me long AAPL stock at $600 between now and expiration for only $10,000. Therefore, leverage gives me the ability to control more stock for a lower initial margin. With that $60,000, I could buy six of the October 500 calls, which would allow me to control *600* shares of stock, not just 100. (Remember that every call option gives the buyer the right, but not the obligation, to purchase 100 shares.)

More Uses of Leverage

I've spent my entire trading career learning to read the market and trade the options contracts that are tied to equities. Trading equity options allows the individual trader to use small account balances and have large

Keene on the Market: Trade to Win Using Unusual Options Activity, Volatility, and Earnings, Andrew Keene.

position sizes. Some options accounts can be set up with as little as $5,000 or even $2,500. Suppose I was trading in a regular brokerage account with a balance of $5,000; I could buy about eight shares of AAPL at $600 each. On the other hand, if I had an options account and I wanted to buy AAPL contracts with one month to expiration, I could control approximately 200 shares of AAPL through the AAPL equity options contracts.

The reason this works is because equity options allow the buyer of the contract to control the right to buy or sell large amounts of the same stock he or she could buy or sell in a normal brokerage account. For a fraction of the price of the underlying stock, I'm given the rights to the same stock. These rights are also tied to a date in the future (expiration date) and a price level of the stock (strike price).

In the case of AAPL, with $5,000 I could buy eight shares outright if they were priced at $600 each. If I wanted to buy options, I would first choose a price I expect AAPL to be at = in the future on a specific date. If I expected AAPL to be at $650 in one month, I would buy AAPL contracts that have value when the underlying shares are at $650 in a month. With every option I trade, I have a time and price target. Even if my time and target are wrong, it's important to always have these in place. Additionally, I structure all of my trades based on how fast I think AAPL will reach its target. If I think AAPL will move up $30 in a week, I will buy further-out-of-the-money calls. This is because I will receive the best percentage return on those calls. However, if I think AAPL will grind higher, I might look at a call spread or call butterfly for this trade. Obviously, there is a reason I put on each and every one of my trades, regardless of profitability. I might find that these options cost per share approximately 1/100 the cost of buying AAPL at the current price.

The options would make money as the price of the underlying (AAPL), moved up toward the $650 *exercise price*. Other factors that go into the value of the options include the volatility of the underlying AAPL stock and the time remaining until the expiration date (often called *options Greeks*).

Real-Time Example of Leverage

Equity options trading can take the concepts of using margin and leverage to extreme levels. Not only is it possible to have one-and-a-half times margin in an options brokerage account (thereby allowing 150 percent purchasing power of your cash balance), but equity options allow the trader to spend a

small amount per options contract to control 100 shares of the underlying stock.

It is best to think about it this way: If you go to Yahoo! Finance and look up AAPL, you will get a current quote for the price of Apple stock. When you click on the "Options" link in the left sidebar then click on a price in the "Strike" column, it will display both the call and put pricing. If AAPL is down 1 percent, you will see the value of the option down 5 percent. In this way, your options contract will be down 1 percent, and you will be making money if you are short the call.

Depending on the price of the options contract, you might have been able to buy an AAPL contract for the price of one share of AAPL. If you bought one share of AAPL at $600 and it was up 1 percent, then your stock would be up $6. At the same time, if you spent the $600 dollars on AAPL equity options, you would have the same 1 percent upward movement, but the 1 percent upward movement would be possibly 5 percent increase of each option (remember, each options contract is for 100 shares of stock). So with a bit of math, we can see that if a share of AAPL went up 1 percent you would make $6.

Also, if the option is a weekly option and it is almost at the expiration date, the movement of the option will be in sync with the cash movement of the underlying stock. This can result in huge gains or losses for the amount of the original price paid for the options contract. In this way, options contracts are highly leveraged. Because you control the 100 shares, you are able to enjoy the benefits of the profit as if you owned the 100 shares of the stock, but at a fraction of the cost. This is why leverage works so well in options trading and why it is possible to have profits of $2,000, $3,000, or even $5,000 in a day.

Let's look at a real-time example from Friday, November 16, 2012. AAPL was down more than $17.50 in the morning to $506. If I had bought 100 shares of stock at the bottom of the day, it would have cost me $50,600. Let's say I was a gambler, and I thought AAPL would rebound to $530. I could have purchased the 520 weekly calls that expired that day for $.50. This would give me the right (but not the obligation) to buy AAPL at $520 from 10 A.M. that day until the end of the day; I am spending $50 per 1 lot for this right. Remember that 1 option controls 100 shares of stock. Let's say I was a little crazy and I bought 1,000 of the weekly 520 calls for $.50, or $50,000 total. The stock closed that day at $530. The stock was a nice purchase and netted a 5 percent profit. However, with the right (but not the obligation) to buy AAPL at $520 with the stock at $530, every option would have been worth $10.

Now check out this math: 1,000 options × 100 shares per option × $9.50 (profits) = I would have netted over $950,000 profits, or 1,900 percent. This is how a relatively small move in stock can generate huge profits with options. The closer to expiration, the higher the profits and the more violent the moves.

Flexibility

Markets are said to trade up and down, but they also go *sideways*. The best thing about options and trading is I can set up a strategy that will make money if the stock goes parabolic higher, moves higher slowly, stays in a range, moves lower slowly, or goes parabolic lower. This is not true for futures, currencies, and other products.

Risk Control

Options allow you to control the risk of stock positions. If I am long stock but scared of gap risk, options help me control my risk. The equities stock market is only open from 6 A.M. CST until 7 P.M. CST, so a stock could gap in the overnight session for a number of reasons. Options help me have a stop order in stock to mitigate this gap risk. If I am long stock, I can buy puts and have downside protection in case the stock gaps lower. If I am long that same stock I cannot set a stop, because stocks are closed for 11 hours a day. If I am short stock, I could buy calls as protection for possible gap risk. These options help me control my risk by having stops just in case a stock gaps higher or lower.

Trader's Edge

Because options are derivatives of stock, the extra level of complexity can cause market mispricing and anomalies that options traders like myself can identify and exploit to our benefit. With the rise of HFT (high-frequency trading), trading stock and futures is becoming increasingly more difficult, but because there are so many factors involved with options it creates many more trading opportunities for traders.

I compare trading options to playing poker, but futures and currency pairs to playing chess. In trading options, there are numerous variables

and bluffing is one of them. This explains why computers are at a rare disadvantage against humans when playing online poker. On the other hand, in chess there is always a correct move, hence computers will always have the upper hand. Consequently, I compare futures and currency trading to a game of chess.

Hedge versus Speculation

While the basis of this book is to describe the practice of trading equity options as an individual investor, the knowledge of options and their uses would not be complete without the mention of using options as a hedging tool.

There are two main reasons why options are bought: One is to hedge a stock position and the other is for speculation of direction.

Options as a Hedge

Let's first look at the four ways options are used as a hedge: buying calls, selling calls, buying puts, and selling puts. Large institutions such as hedge funds, mutual funds, and big banks can do this. Buying and selling options as a hedge against a larger equity position is usually done for legitimate reasons, and can act as buying insurance against a downward movement in a stock. A long call position can act as a hedge against a short stock position. Obviously, most people own insurance against their homes, car, or even jewelry, so why not own an insurance against a stock portfolio? Buying puts is one of the easiest ways to hedge a long stock position. Similar to homeowner's insurance, an investor pays a small premium to hold insurance for a set period of time, be it weekly, monthly, or yearly. This protects the stock to the downside, but still allows the holder to reap all the benefits to the upside. This has a similar profit-and-loss graph to that of a long call.

We will look at the *OCRRBTT* Trading Plan in another chapter to help us determine if trades are speculative or a hedge against another position. I never know a trader's stock position against a trade, but my proprietary trading plan helps me gauge what a trader's stock position is likely to be.

Options for Speculation

Getting into options trading can allow you to reap the rewards of an upward or downward movement in stock. If an options position is not

purchased for a hedge, it is then used as speculation. These trades are more transparent and easier to read through the *OCRRBTT* Trading Plan, which we will discuss in Chapter 18. A trader can make large amounts of profits using options on small movements in stock. Where you see stocks move 2, 3, or even 5 percent a day, options allow the use of leverage to buy contracts. Even with sensible risk management, safe trading, and money management techniques built into every trade and your account as a whole the potential for high percentage gains is present in equity options trading.

Since options are leveraged, traders can make large amounts of money on very small moves in the stock. Let's look at FB at $20. I am long the FB January 22 calls for $1.00. I am betting on a move higher. These calls might have a 35 delta and a gamma of 5, which means that the option moves $.40 for every dollar of increase in stock price. Let's say FB rallies from $20 to $21, which is a 5 percent move. These calls will now rally from $1 to $1.40, which is good for a 40 percent return on just a 5 percent move in the stock price. This seems too good to be true, but it does have a few drawbacks. Every day that Facebook does not move, the calls in theory will decrease in value due to time decay. This shows us how options are like sticks of dynamite waiting to explode with small amounts of move in stock, but I always keep an eye on the time decay of these options.

Complex Options Strategies

Another advantage of options is the ability to set up complex trades capable of money in nearly any environment. While it is usually only possible to go long or short in stock, allowing traders to make money in either up or down markets, options traders have more choices. For example, a trader can set up his trade to make money when it is unknown whether the stock will go up or down, or move sideways, neither up nor down. Most trading software allows traders to set up complex trades fairly easily. These trades can include *condors*, *call butterflies*, *put spreads*, and even *strangles*. (It sounds cooler to say "I have a put butterfly in AAPL" rather than "I'm short AAPL.")

Some trade options as a technique to incorporate into their investment portfolio to add an income stream to an otherwise conservative stock,

bond, and mutual bond investments. Others have set aside a small amount of their overall investable assets and use this money to trade options for enhanced capital gains, leaving the remainder of their portfolios in low-risk assets.

Others like myself have a larger dollar amount in their accounts and use options trading as a way to make a living. While I'm an individual trader and do not work for a salary, the main goal of my trading is to earn enough to draw a paycheck. This means that I trade more seriously than those who trade as a hobby. Staying profitable is the goal of all traders, but for those who trade for a living, it is much more important. My number-one goal is to make the most money possible for myself. I don't trade just to trade. I choose the best, highest probability trades, so there are minutes, hours, or even days where I do not make a trade, and I am fine with that.

Those who learn to trade well can make a living for themselves in the markets. These traders use their wit and wisdom in the name of profit. To some it is a sport, competitive and exciting. It takes skill to understand the markets, read signals, look for setups, and trade successfully.

"If Only I Had Bought Those Calls!"

I can structure trades any way I want. I can make trades for earnings, *not* for earnings, for weeklies, *not* for weeklies, for high risk with low reward, or for risk and high reward. Many traders are investors who watch CNBC or Bloomberg and think to themselves, "Look at that stock that is getting taken over for $20 premium. If *only* I was long calls in that stock!" CNBC and Bloomberg put on *news*, so of course they are going to show any stock that is moving. Chasing mere hopes and dreams is not part of my trading plan. You will not see anywhere in this book that I buy calls on rumors of a takeover. That is *not* a trading plan. You would have a better chance playing the lottery than going and buying options every single time you see "paper" buy calls. Calls in theory have limited risk, the amount you pay for them, and unlimited rewards, as the stock in theory can go to unlimited highs. Often times traders buy deep out-of-the money hoping for a stock to be acquired by another company. This is not part of my trading plan, because this is not trading, this is gambling. If you want to gamble, play the lottery, if you want to trade, stick with the trading plan.

When in Doubt, Hands Out

When I started with my first trading firm, there was a general rule; "When in doubt, hands out." What does this mean? In a nutshell, it means selling. Our trading firm and the most successful traders were better traders when they were short vega, short gamma, and short premium. The reason is that every day a stock does not move, they make money. In Las Vegas, would I rather be the House or the player making the bets? Naturally, I would want to be getting money in my pocket; yes, I will have to pay some out, but I would rather be the House because the odds are always in its favor. So, when I trade, I often don't buy calls or puts outright. I have problems trying to figure out when to sell a call that I purchased. Let's say I bought a call in AAPL for $1; if it goes to $1.20, would I want to sell it out right away? Well, if I did, then I was really risking $1.00 or $100 per 1 lot to make only $20, not a good risk-versus-reward setup. What if it goes to $2? Well, then it could go to $4, or $8. I am a much better trader with short gamma or selling spreads than buying calls or puts outright. Also, if I see paper buy calls and puts and then I buy them, I am buying them at an increased implied volatility level. So, I always say to everyone who trades, stick to what makes you money, but I just want to show what has been successful for me over the past 11 years.

What It Takes to Make a Bigger Trade

With the *.5- to 15-percent rule* in mind, if you want to make a bigger trade on AAPL, then you will have to wire or send along some more money into your account just to keep the position size limited to a maximum of 5 percent of the account balance. For example, a trader has an account that has a balance of $7,500 and he wants to trade a December 25 call option of social media giant Facebook (FB) with today's trading price at $20, and an out-of-the-money call option with a strike price of $25 is $0.45. Since each option contract is for 100 shares, the minimum the trader could purchase is $0.45 × 100 or $4,500. The options trader has read all of the fundamentals, the technicals, and his broker's recommendations, leading him to feel strongly the stock will exceed the strike price by its expiration date. Since he is following the trading plan and is confident on his trade, but only wants to risk .5 percent of his total book, he can buy a maximum of $375 worth

of FB December 25 calls. Since $7,500 × .05 = $375, he knows he can only buy eight contracts for a total of $360 plus commissions. If the trader wants to take a bigger position in FB options, then he will have to increase the total balance in his brokerage account to meet the needs of the 15 percent maximum rule.

Every trader trades differently. Most traders want to focus on 3 to 5 stocks they feel they know very well. I want to trade many stocks with unusual options activity and earnings, because I excel in these. So, at any given time, I might have positions on in 60 stocks, with 50 of them being a 4 or 5 on my Confidence Scale (see Chapter 17), less than 1 percent of my total book. I have not traded a 1 on my "Andrew Keene's Non-Blowout Trading Plan," 5 to 15 percent of my book, in probably six months. Hitting singles keeps me in the game and the bell-shaped curve will turn me into a profitable trader as the results show: I am up 30 percent year-over-year for the past 11 years and 20 percent for the past four months. All of this trading is never in a group account or firm position. I estimate that I have traded over 1 million equity options in my career and 50 million shares of stock.

Even though I am not trading $50 million, I consider myself to be running a small hedge fund, managed and controlled by me. If I ever want to get long a stock but want protection, I will buy out-of-the-money puts and extra stock. What does this mean? If I thought a stock was going higher, I know the further out-of-the-money a put is, the higher the implied volatility will be. That is known as *volatility smile*. So, if I bought 100 AAPL January 570 puts for $5 when the stock was $600 and the delta was 25, instead of hedging them on a 25 delta, I would buy 3,500 shares of stock. As the stock moved higher, I would make money on the "extra" long stock, and also the price of the puts on an implied volatility would often increase, because the farther a put is out-of-the-money, the higher the implied volatility will be. This position will get killed on a slow grind lower.

If I wanted to get short, I would buy upside calls and sell "extra stock." So, if AAPL is $600 and I was bearish, I would buy the $630 calls for $5 on a 25 delta and then sell 3,500 shares of stock instead of the proper hedge of 2,500 shares. I will make money in the short stock, and I also know that as stocks move lower, often the implied volatility moves higher, so I will make money on the delta, gamma, and vega. Once again, if the stock slowly grinds higher, I will lose money on this position on both the delta and volatility as implied volatility goes lower as a stock moves higher.

Questions

1. A trader can make money in any direction or lack of direction in the stock market.
   a. True
   b. False
2. Which of the following helps determine your trading?
   a. Risk-versus-reward setup
   b. Stocks' overnight gap risk
   c. Options having many different strikes
   d. All of the above
3. Which of these does *not* have overnight gap risk?
   a. AAPL stock
   b. GOOG stock
   c. FB stock
   d. S&P 500 futures
4. The use of leverage helps in trading _____.
   a. Options
   b. Stock
   c. Futures
   d. Currency pairs
5. What time does stock start trading in the morning (CST)?
   a. 4 A.M.
   b. 6 A.M.
   c. 8:30 A.M.
   d. 10 A.M.
6. Options can be used both for speculation and as a hedge.
   a. True
   b. False
7. A trader should buy calls every time he hears takeover rumors.
   a. True
   b. False
8. The least important thing in trading is _____.
   a. Sticking with a plan
   b. Listening to other traders
   c. Trading based on the TV bandwagon
   d. Overtrading
9. An options trader can use leverage to control a larger amount of stock for a lower price.
   a. True
   b. False

Questions (*Continued*)

10. A complex options trading strategy should be used by _____.

- **a.** Seasoned professionals only
- **b.** A beginner
- **c.** Anyone with money
- **d.** A trader who does not understand Greeks yet

CHAPTER 15

More Complex Options Strategies

Long Straddles and Strangles

Straddles and strangles are considered *nondirectional* strategies, or complex options strategies that can make profits whether the stock moves up or down. It is also important to understand that these strategies have near-zero deltas. These strategies are favorites in my arsenal because if you play them from the long side with the right catalyst, they have limited risk and unlimited profit potential.

Long Straddle

Strategy	Nondirectional, but a huge move in either direction is needed or an increase of implied volatility.
Outlook	I am expecting either a large bullish or bearish move or an increase of implied volatility.
Trade	Buy calls and puts of the same strike with the same expiration.
Advantages	I can place a bet that the stock will move, but if I am unsure about the direction of the move, this strategy will make money in movement in either direction. This strategy is commonly used with a catalyst such as earnings or a drug announcement.

Keene on the Market: Trade to Win Using Unusual Options Activity, Volatility, and Earnings, Andrew Keene.

Disadvantages	If the stock doesn't move, this position will lose money due to time decay. Also, if implied volatility moves lower, then this spread will lose money.
Maximum risk	The amount I paid for the straddle.
Maximum reward	In theory, the calls I am long have unlimited reward. To the downside, the stocks can only go to zero, so the downside movement is capped.
Breakeven	Upper: Straddle strike price + Price of straddle paid. Lower: Straddle strike price – Price of straddle paid.
Drawbacks	*Time decay effect:* Theta has a negative effect on straddles. Every day the stock does not move, in theory, this straddle will be worth that much less. Since options have time value, every day that gets closer until expiration the less "time value" the options will have. This tells us that if I am long straddles then the straddle will decay in premium daily.

Greeks of a Long Straddle

Delta	If the call is in the money, this straddle will have a positive delta. If both options are close to at-the-money, then the straddle will have a delta close to zero. If the put is in-the-money, then this straddle will have a negative delta.
Gamma	Gamma will always be positive, but is the highest at-the-money.
Vega	Rising volatility helps this trade.
Rho	If the calls are in-the-money, then increasing interest rates will help this position. If the puts are in-the-money, then increasing interest rates will hurt this position.

As an example, AAPL is trading $700 and I think that earnings of the stock will move, but I am unsure which direction the stock will move. If I thought the stock would make a *huge* movement on earnings, I would buy an at-the-money straddle. If I bought the November 700 calls for $22 and the November 700 puts for $22, I would need the stock to move more than $44 in either direction to make money. I could also make money on this trade if the implied volatility increased as well (refer to Figure 15.1, as displayed with XYZ).

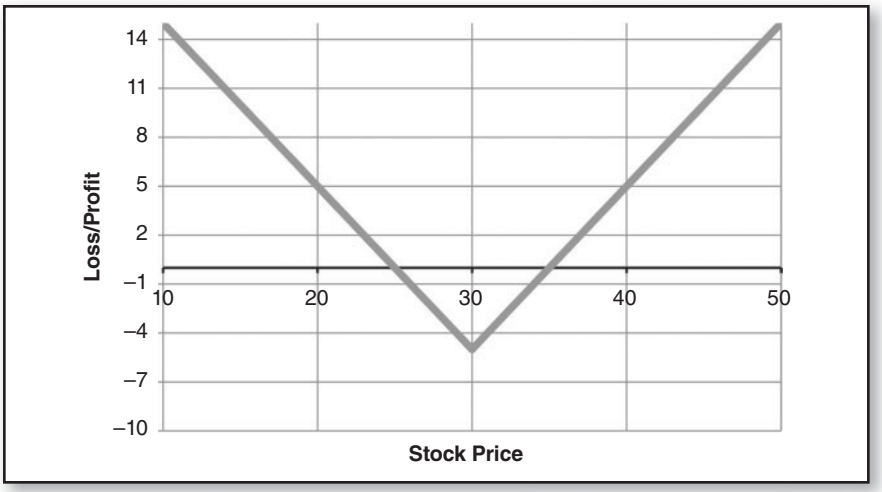

FIGURE 15.1 Long XYZ 30 Straddle for $5.00

Long Strangle

Strategy	Nondirectional.
Outlook	Nondirectional, but a huge move in either direction is needed or an increase in implied volatility.
Trade	Buy an out-of-the-money call and an out-of-the-money put.
Advantages	Less expensive than an at-the-money straddle, because both options will be out-of-the-money.
Disadvantages	I need the stock to move to either long strike first in order for either option to start to receive intrinsic value.
Risk	If the stock doesn't move, this position will lose money due to time decay. Also, if implied volatility moves lower, in this spread will lose money.
Maximum risk	The amount I paid for the strangle.
Maximum reward	In theory, the calls I am long have unlimited reward. To the downside, the stocks can only go to zero, so the downside movement is capped.
Breakeven	Upper: Strike price call + Price of strangle paid. Lower: Strike price put – Price of straddle paid.
Drawbacks	*Time decay effect:* Theta has a negative effect on straddles. Every day the stock does not move, in theory, this straddle will be worth that much less.

Greeks of a Long Strangle

Delta	Usually close to zero.
Gamma	Always positive; increases as it gets to at-the-money.
Vega	Always positive; an increase in implied volatility will make this trade profitable.
Rho	Usually close to zero.

For example, AAPL is trading $700 and I think that on earnings the stock will move, but I make money on this trade if the implied volatility increases as well.

I am not a big fan of strangles; if I expect movement, I would rather be trading at-the-money straddles. I will never get long strangles unless I think that the stock will move due to a catalyst.

As another example (see Figure 15.2), if I thought that FB would make a huge movement on earnings, but I was not sure which direction, I could buy a strangle. With FB at $24, I could buy the December 22 puts for $1 and December 26 calls for $1. My risk in this trade would be $2, or $200 per 1 lot, but my reward is unlimited. This sets up as a good risk-versus-reward trade (refer to Figure 15.2, as displayed with XYZ).

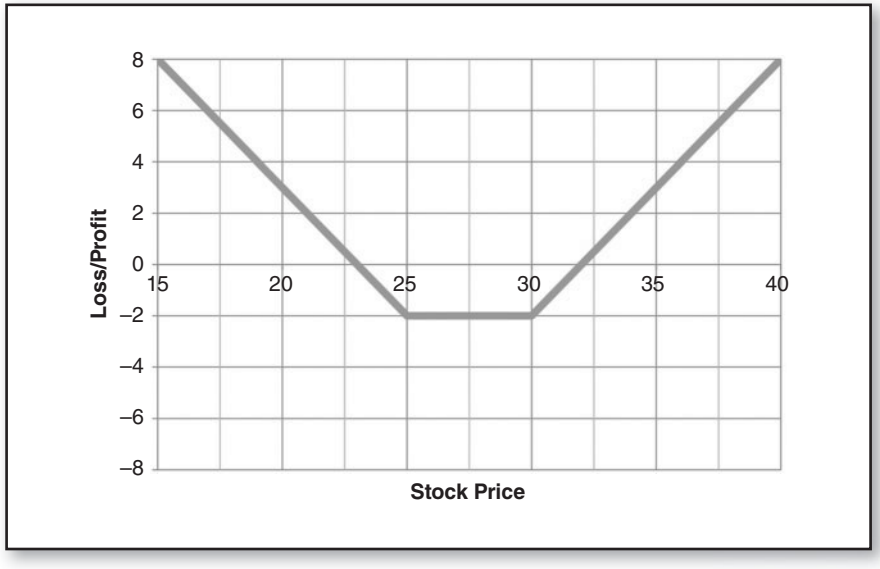

FIGURE 15.2 Long XYZ 25 Put–30 Call Strangle for $2.00.

Short Straddles and Strangles: Beware Blowout Risk!

Long straddles and strangles have unlimited profit potential and limited risk. But if you are short straddles and strangles, you are breaking the first rule of trading options: *Never sell options naked*.

If you ever implement this strategy (*which I do not recommend*), the best time to do so would be when you expect zero or very little movement in the stock and ideally with very little time till expiration.

Short Straddle

Strategy	Directional.
Outlook	You are expecting a small movement, either a bullish or bearish move, or you are expecting a decrease of implied volatility.
Trade	Sell calls and puts of the same strike with the same expiration.
Advantages	Make money every day that goes by through time decay when the stock does not move at all.
Disadvantages	Selling straddles means blowout risk. I never institute this strategy, because selling calls, just like selling stock, has unlimited risk and can blow out my entire trading account.
Risk	In theory, the risk to the downside is limited because stocks can only go to zero, but there is unlimited risk to the upside.
Maximum risk	Upside: Unlimited. Downside: Strike price of straddle minus amount sold for.
Maximum reward	The amount I sold the straddle for.
Breakeven	Upper: Strike price straddle + Price of straddle sold. Lower: Strike price of straddle – Price of straddle sold. *Time decay effect:* Theta has a positive effect on straddles. Every day the stock does not move, in theory, the straddle will decrease in value.

Greeks of a Short Straddle

Delta	If the call is in-the-money, this straddle will have a negative delta. If both options are close to at-the-money, then the strike will have a delta close to zero. If the put is in-the-money, then this straddle will have a positive delta.
Gamma	Gamma will always be negative, but is highest at-the-money.
Vega	Rising implied volatility hurts this trade.
Rho	If the calls are in-the-money, then increasing interest rates will hurt this position. If the puts are in-the-money, then increasing interest rates will help this position.

For example, GOOG is trading $750 and I do not think that GOOG will make a big move on earnings, but I am not sure. I could sell the GOOG October 750 calls for $25 and the GOOG October 750 puts for $25. I make money as long as GOOG does not move under $700 to the downside or above $800 to the upside. This trade does bring me limited reward but also unlimited risk (see Figure 15.3).

If I ever wanted to bet on movement when I thought a stock would *not* move as much as expected, I would sell condors instead of straddles. We will discuss this concept in a later chapter, but trading condors prevents blowout risk (refer to Figure 15.3, as displayed with XYZ).

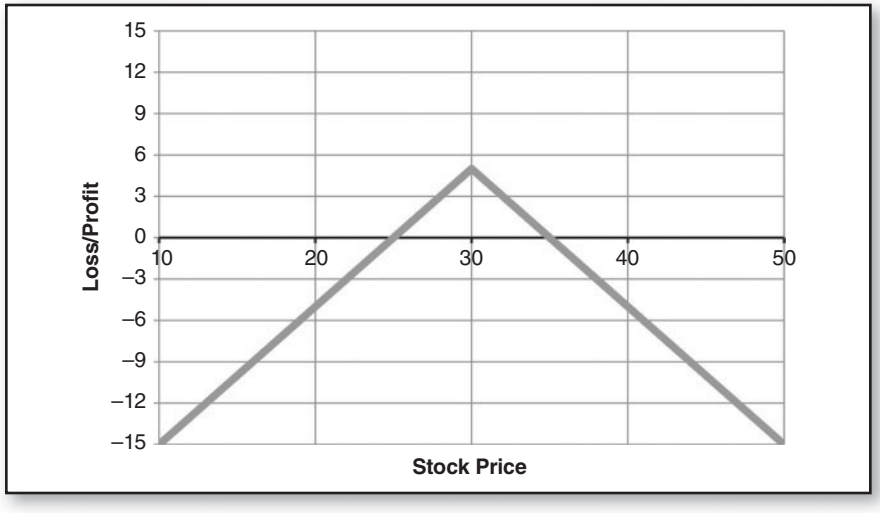

FIGURE 15.3 Short XYZ 30 Straddle for $5.00.

Short Strangle

Strategy	Directional.
Outlook	You are expecting a small movement in either direction or you are expecting a decrease of implied volatility.
Trade	Sell out-of-the-money calls and out-of-the-money puts.
Advantages	Make money every day that goes by through time decay when the stock does not move at all.
Disadvantages	Selling strangles means blowout risk. I never institute this strategy, because selling calls, just like selling stock, has unlimited risk and could blow out my entire trading account.
Risk	In theory, the risk to the downside is limited, because stocks can only go to zero, but there is unlimited risk to the upside.
Maximum risk	Downside: Strike price of put minus amount strangle is sold for.
Maximum reward	The amount I sold the strangle for.
Breakeven	Upper: Strike price call + Price of strangle sold. Lower: Strike price of put – Price of strangle sold.
Drawbacks	*Time decay effect:* Theta has a positive effect on straddles. Every day the stock does not move, the more time value will exist in this trade.

Greeks of a Short Strangle

Delta	This strangle will usually have a delta close to zero.
Gamma	Gamma will always be negative, but is highest closest to at-the-money.
Vega	Rising implied volatility hurts this trade.
Rho	Rho for this strangle is usually close to zero.

As an example, if GOOG is trading $750 and I do not think that GOOG will make a big move on earnings, but I am not sure which way it will move, I could sell the GOOG October 770 calls for $12 and the GOOG October 730 puts for $12. I make money as long as GOOG does not move under $706 to the downside or above $794 to the upside. This trade does bring me limited reward, but also unlimited risk (refer to Figure 15.4, as displayed with XYZ).

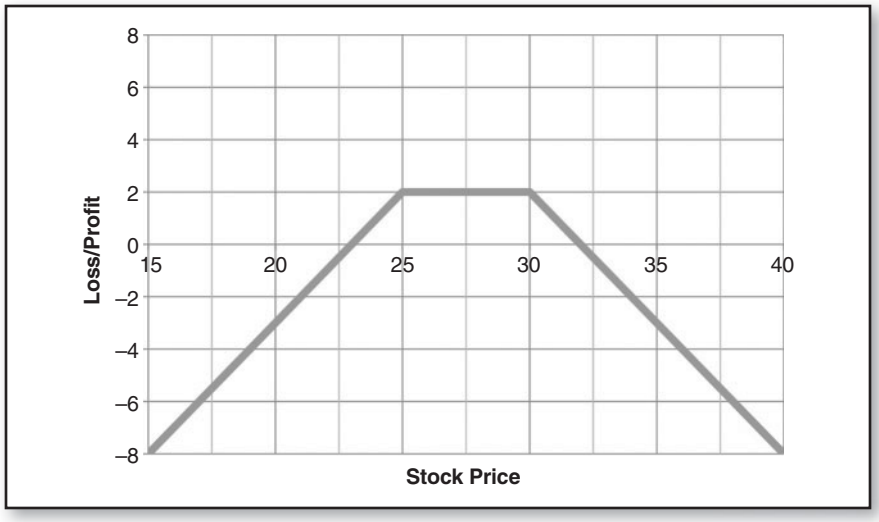

FIGURE 15.4 Short XYZ 25 Put–30 Call Strangle for $2.00

If I ever wanted to bet on movement when I thought a stock would *not* move as much as was expected, then I would sell condors instead of straddles. Selling condors instead of outright calls prevents me from blowout risk.

Butterflies and Condors

Long Call Butterfly

Over its lifetime, a stock usually spends up to 65 percent of the time in sideways or directionless price action. Knowing this key statistic is the essence for this strategy section.

Strategy	This strategy is just a bull call spread and bear call spread with a shared strike.
Outlook	Stock will stay above lowest strike call and closest to middle strike call.
Trade	Buy low strike call, sell middle strike call, sell middle strike call again, buy high strike call—all with the same expiration dates.
Advantages	You can take advantage of a stock movement to middle strike call. You can take advantage of a stock closing in a wide range and get a great percentage return in expires on the short strike.

Disadvantages	The reward is capped, and since there are four legs of a spread, these trades can be commission killers. (Commissions eat against a trader's profits and the more options that are traded the more commissions a trader has to pay for the trade. Therefore, if a trader places a four-legged trade, they will have to pay commissions for four options increase the price paid for the spread.)
Risk	If a stock moves parabolic higher and I was right on the directional sense, this trade will not be profitable because it moved too far, too fast.
Maximum risk	The most I can ever lose is the amount I paid for the call butterfly.
Maximum reward	Difference between the highest strike minus the middle strike minus the amount paid for the spread.
Breakeven points	Lower B/E: Lowest strike call plus the amount paid for the call fly. Higher B/E: Highest strike call minus the amount paid for the call fly.
Drawbacks	*Time decay effect:* Theta time decay is helpful with this position when the short strike is closest to at-the-money. Time decay will hurt this position if the long strike is closest to at-the-money.

Greeks of a Long Call Butterfly

Delta	Could be close to zero; depends on which legs are in-the-money, at-the-money, and out-of-the-money.
Gamma	Gamma will be positive when one of the long strikes is closest to the at-the-money strike. Gamma will be negative when the middle strike it closest to at-the-money.
Vega	Vega will be positive when one of the long strikes is closest to the at-the-money strike. Vega will be negative when the middle strike is closest to at-the-money.
Rho	Rho will be close to zero.

In order to be a true call fly, the difference between the lowest strike call and the middle strike call has to be the same distance as the middle strike call to the highest strike call.

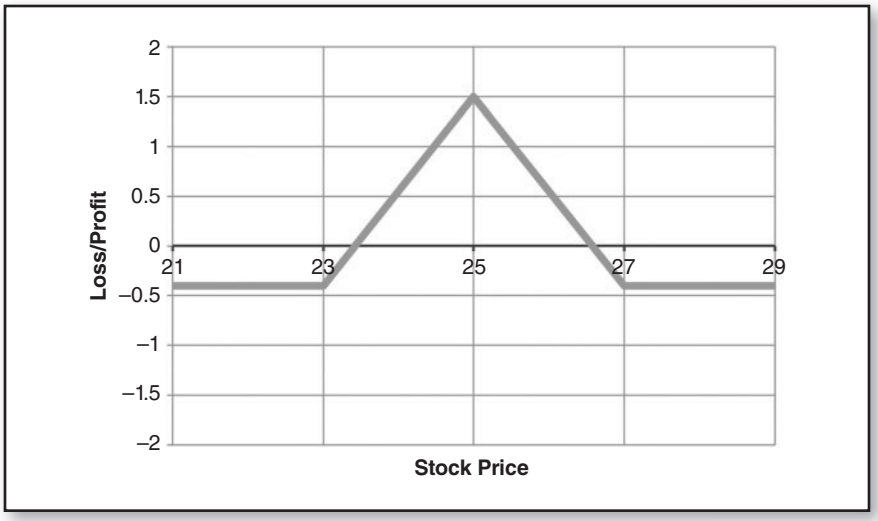

FIGURE 15.5 Long FB 23-25-27 Call Butterfly for $.40

For example, if FB was trading $22 and I thought the stock would move high, but not too much higher, I could buy the FB November 23-25-27 call fly for $.40 (see Figure 15.5). In this trade, I would be risking $40 per 1 lot to make $160 per 1 lot. These are my favorite types of trades for earnings, because I will make money if FB closes between $23.40 and $26.60, and also I can make four times my money if FB closes right at $25.

Long Put Butterfly

Strategy	This strategy is just a bear put spread and bull put spread with a shared strike.
Outlook	Stock will stay above highest strike put and closest to middle strike put.
Trade	Buy highest strike put, sell middle strike put, sell middle strike put again, buy lowest strike put—all with the same expiration dates.
Advantages	You can take advantage of a stock closing in a wide range and get a great percentage return in expires on the short strike.

Disadvantages	The reward is capped and since there are four legs of a spread, executing these trades can be very expensive on commissions.
Risk	If a stock moves parabolic lower and I was right on the directional sense, this trade will not be profitable because it moved too far, too fast.
Maximum risk	The most I can ever lose is the amount I paid for the put butterfly.
Maximum reward	Difference between the highest strike put minus the middle strike put minus the amount paid for the spread.
Breakeven points	Higher B/E: Highest strike put minus the amount paid for the put. Lower B/E: Lowest strike put plus the amount paid for the put fly.
Drawbacks	*Time decay effect:* Theta time decay is helpful with this position when the short strike is closest to at-the-money. Time decay will hurt this position if the long strike is closest to at-the-money.

Greeks of a Long Put Butterfly

Delta	Could be close to zero; depends on which legs are in-the-money, at-the-money, and out-of-the-money.
Gamma	Gamma will be positive when one of the long strikes is closest to the at-the-money strike. Gamma will be negative when the middle strike is closest to at-the-money.
Vega	Vega will be positive when one of the long strikes is closest to the at-the-money strike. Vega will be negative when the middle strike is closest to at-the-money.
Rho	Rho will be close to zero.

For example, if QCOM was trading $62.50 and I thought the stock would move lower, but not too much lower, I could buy the QCOM January 2013 60-57.5-55 put fly for $.25 (see Figure 15.6). In this trade, I would be risking $25 per 1 lot to make $225 per 1 lot. These are my favorite types of trades for earnings, because I will make money if QCOM closes between $55.25 and $59.75, and also I can make 10 times my money if QCOM closes right at $57.50.

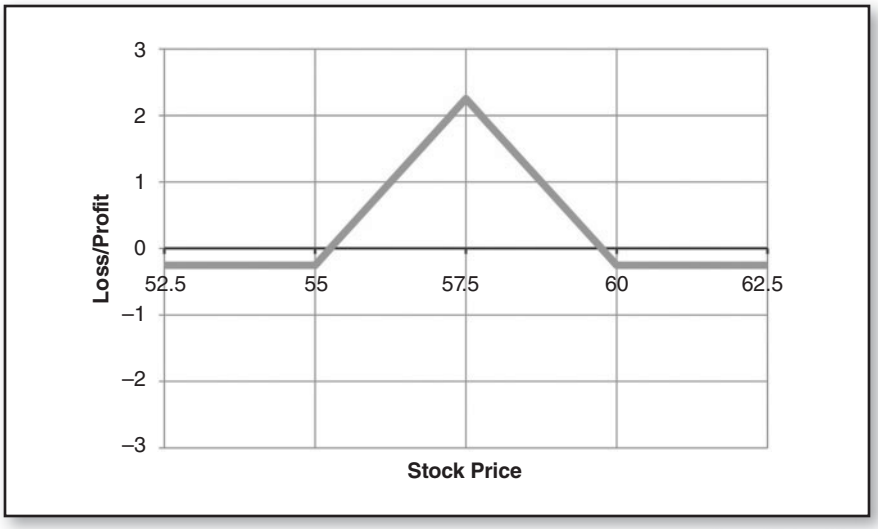

FIGURE 15.6 Long QCOM Jan 60-57.5-55 Put Butterfly for $.25

Short Condor

Strategy	Nondirectional, but a huge move in either direction is needed or an increase of implied volatility.
Outlook	I am expecting either a large bullish or bearish move or an increase of implied volatility.
Trade	Buy out-of-the-money call spread and buy out-of-the-money put spread with the same expiration.
Advantages	I can place a bet that the stock will move, but even if I am unsure the direction of the move, this strategy will make money in movement in either direction.
Disadvantages	My reward is capped on both sides (unlike a strangle).
Risk	If the stock doesn't move, this position will lose money due to time decay. Also, if implied volatility moves lower, then this spread will lose money.
Maximum risk	The amount I paid for the condor.
Maximum reward	The amount of the difference between long strike call and short strike call minus the amount I paid for the spread.
Breakeven	Upper: Long call strike price + Price of condor paid. Lower: Long put strike price – Price of condor paid.

Drawbacks	*Time decay effect:* Theta has a negative effect on short condors. Every day the stock does not move, in theory, this condor will be worth less.

Greeks of a Short Condor

Delta	If the call and put spreads are close to the same amount out-of-the-money, then the short condor will have close to zero delta.
Gamma	Gamma will always be positive, but is highest at-the-money.
Vega	Rising implied volatility helps this trade.
Rho	Rho will be close to zero.

For example, AAPL is trading $670 and I think the stock will move on earnings, but am unsure the direction of the move. If I thought the stock would make a *huge* movement on earnings, I could buy the at-the-money straddle. If I bought the November 700 calls for $17.50, I would sell the November 710 calls for $14.20. I would then buy the November 640 puts for $21.50 and sell the 630 puts for $18. This short condor would cost me a net of $6.30. I would need the stock to move under $633.70 or above $706.30 to make money on this trade. I could make money on this trade if the implied volatility increased as well (see Figure 15.7).

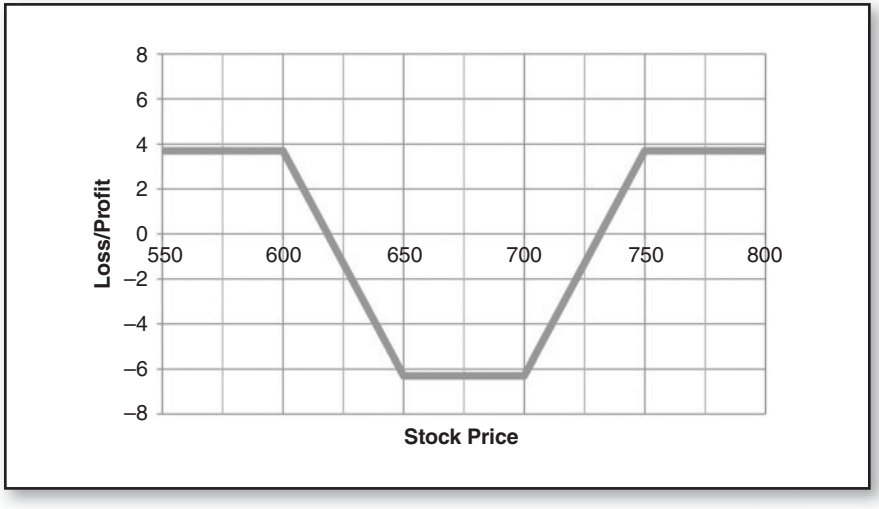

FIGURE 15.7 Long AAPL Nov 700–710 Call Spread and 640–630 Put Spread for $6.30 Total Debit.

I do not like these strategies too much. I have executed them for trades a couple of times for earnings in GMCR and GOOG, but I do not think they set up for a great risk versus reward unless the stock will make a huge move on earnings.

Long Condor

Strategy	Nondirectional, but a small move in either direction is needed or an increase or decrease in implied volatility.
Outlook	I am expecting either a small bullish or bearish move or a decrease of implied volatility.
Trade	Sell out-of-the-money call spread and sell out-of-the-money put spread with the same expiration.
Advantages	I can place a bet that the stock will *not* move, but if I am unsure which direction the stock will move, this strategy will make money in lack of movement in either direction.
Disadvantages	My reward is less than selling out-of-the-money strangles.
Risk	If the stock does move out of the strike, this position will lose money. Also, if implied volatility moves higher, then this spread will lose money.
Maximum risk	The amount of the difference between long strike call and short strike call minus the amount I sold for the spread.
Maximum reward	The amount I sold the condor for.
Breakeven	Upper: Short call strike price + Price of condor sold. Lower: Short put strike price – Price of condor sold.
Drawbacks	This trade will be less profitable than a short strangle, and the commissions on four legs of a spread can be very costly.

Greeks of a Long Condor

Delta	If the call and put spreads are close to the same amount out-of-the-money, then the long condor will have close to zero delta.
Gamma	Gamma will always be negative, but is highest at-the-money.
Vega	Rising implied volatility hurts this trade.
Rho	Rho will be close to zero.

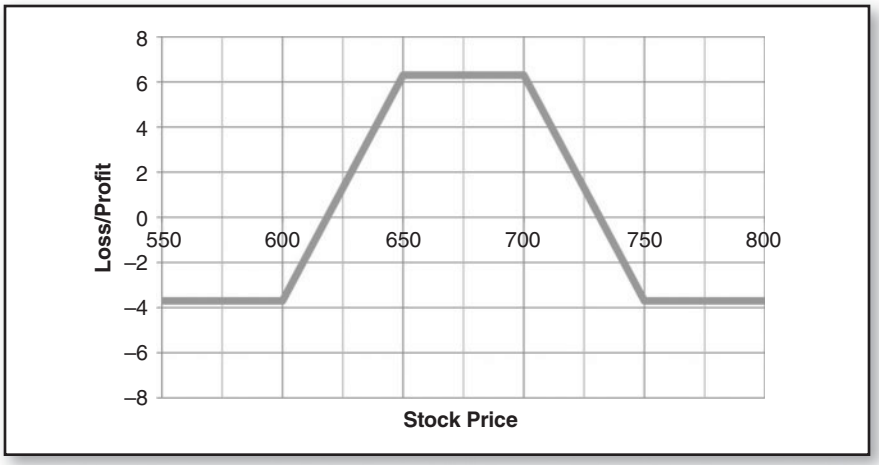

FIGURE 15.8 Short AAPL Nov 700–710 Call Spread and 640–630 Put Spread for $6.30 Total Credit

For example, AAPL is trading $670 and I think that on earnings the stock will not move as much as expected. If I sell the November 700 calls for $17.50, and buy the November 710 calls for $14.20, I would then sell the November 640 puts for $21.50 and buy the 630 puts for $18. This long condor would net me a credit of $6.30. I would need the stock to stay between $633.70 and $706.30 to make money on this trade. I could also make money on this trade if the implied volatility decreased as well (see Figure 15.8).

I typically like these strategies for earnings. I have executed them for earnings trades multiple times in CMG and WYNN, and I think they are a great risk versus reward unless the stock makes a big move on earnings.

Questions

1. If I am short a straddle, then I have limited risk and unlimited rewards.
   a. True
   b. False
2. When I am long a strangle then I want the stock to _____.
   a. Expect a big movement in the stock
   b. Not move at all
   c. Move only a little bit
   d. The implied volatility to move lower

(*Continued*)

Questions (*Continued*)

3. When I am long a call butterfly the most I can lose is the amount I pay for the butterfly?
   - **a.** True
   - **b** False
4. Which of the following trades is the riskiest?
   - **a.** Long straddle
   - **b.** Long strangle
   - **c.** Short condor
   - **d.** Short straddle
5. A trader has limited risk and unlimited rewards when they are long a strangle.
   - **a.** True
   - **b.** False
6. Which trade does not have limited risk?
   - **a.** Long straddle
   - **b.** Short strangle
   - **c.** Long strangle
   - **d.** Long condor
7. If I am long a straddle which Greek cannot be positive?
   - **a.** Gamma
   - **b.** Vega
   - **c.** Delta
   - **d.** Theta
8. If I am short a strangle, which Greek cannot be negative?
   - **a.** Gamma
   - **b.** Theta
   - **c.** Vega
   - **d.** Delta
9. I have unlimited risk to the downside when I am short a strangle?
   - **a.** True
   - **b.** False
10. When I am short a condor then my risk is limited and my reward is limited?
    - **a.** True
    - **b.** False

CHAPTER 16

Managing Trades on Expiration

My primary trading goal is simple: to make money. I am not trading on a day-to-day basis to make friends, or to make my clearing firm money, or because I enjoy gambling. My goal is to make the most money I can so that I have money to do the other things I enjoy in life, such as volunteering at the Boys & Girls Club and the local soup kitchen, and spending more time with my family. Obviously, I also trade to have fun, but after making money, *managing my positions* is my second goal. If I do not manage my positions, I can turn a position with small risk into one with huge amounts of risk. I often compare myself to a hedge fund manager, which means that I make every decision: when to get long, short, exit a profitable trade, or pull the ripcord on a trade that is not working. When I am trading and have positions on in up to 60 stocks, it is imperative I manage them properly.

It is vitally important to manage trades properly on expiration. Since I trade so many different strategies, I have to make sure that *each trade* is managed properly on expiration. I am not a buy-and-hold investor. I put on positions using the *OCRRBTT* and *HIMCRRBTT* Trading Plans (see Chapters 18 and 19). When I am managing my risk on expiration my goal is to *not* have an options position convert to long or short stock on Monday. That means I have to manage *all* my calls and puts on expiration, with either stock or options, in order to avoid delivery of *any* stock. Just as in trading corn or wheat, I would not want a commodity delivered on my lawn—I want to have the trade over with and move on to the next trade.

Keene on the Market: Trade to Win Using Unusual Options Activity, Volatility, and Earnings, Andrew Keene.

This chapter looks at every *single-strategy option*, and more complex strategies, from a long call to an iron condor, and how to manage each trade on expiration. We will see how the most important time of the week is Friday at 2:45 P.M. CST, and the difference two pennies can make in determining the difference between long and short stock. I will tell you why I always cover those cheap options for a penny in case of breaking news, and how I might get some extra beer money with those options that I am long.

This chapter might be the most important one in this book, because so few traders talk about managing trades on expiration and understanding them is so simple. This is all about risk management.

The following table shows what every *single-strategy* option will do on expiration in terms of conversion to stock. (We will be referring to this table throughout our discussions in this chapter.)

Option	In-the-Money	Out-of-the Money
Long call	Long stock:	Worthless:
	Call strike < Stock price	Call strike > Stock price
Short call	Short stock:	Worthless:
	Call strike < Stock price	Call strike > Stock price
Long put	Short stock:	Worthless:
	Put strike > Stock price	Put strike < Stock price
Short put	Long stock:	Worthless:
	Put strike > Stock price	Put strike < Stock price

Long Call—Long the FB November 23 Calls

In any single-strategy option there are only two situations: The option has value and is in-the-money, or the option is out-of-the money and worthless. Once an option is in-the-money, then there are two choices that we can use to make sure that no option converts to a stock position after expiration. Often, if it gets pinned and lands right on the long strike, then I will choose *not* to exercise my option and move to the next trade. The OCC has *automatic exercise* with one penny in-the-money. That means that the final print of the stock is much more important than most traders realize. If you are long the FB November 23 calls and it is trading $22.50 all day, but then the stock prints at $23.01 at 3:00 P.M. CST, the clearing firm does not know if you want to exercise this option, but the one-penny rule makes this an automatic exercise to long stock.

Under $23: $.01–$22.99, same result: The FB November 23 calls will be worthless and, using our single-strategy table at the beginning of this chapter, after expiration the calls will leave no stock position.

$23 is always the magic number: If the stock lands right at the strike number, I will choose *not* to exercise my calls–waste of commissions.

Above $23: $23.01–unlimited: The FB calls will convert to long stock and I can either sell the $23 calls outright or sell stock against the calls that will convert to long stock. If I am long stock *and* short stock, it will negate to nothing and I will have an unwanted stock position after expiration. Depending on the clearing firm, I have to see whether it is cheaper to sell stock and exercise the calls or sell the calls outright; ultimately, I will choose whatever has a cheaper commission. In some stocks, the option market is wide, so it might make more sense to exercise calls than sell stock; in other stocks, such as AAPL, it makes more sense to sell the calls outright.

So, the difference between $22.99 and $23.01 ($.02) is the difference between no stock position and long stock, so it is very important to understand (see Figure 16.1).

- $22.99 or below: Calls are worthless, nothing to do.
- $23.00: Do *not* exercise the FB November 23 calls on the pin.
- $23.01 or above: Sell the FB November 23 calls or sell stock.

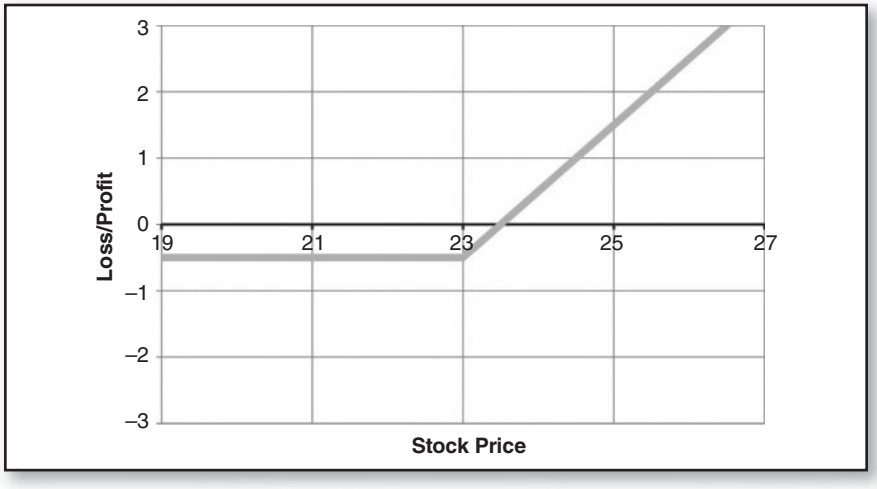

FIGURE 16.1 Long FB Nov 23 Calls for $.50

Short Call—Short the AAPL November 500 Calls

Above $500: $500.01–unlimited, same result: The short AAPL November 500 calls will convert to short stock and I can either buy the $500 calls outright or buy stock against the calls that will convert to short stock. If I am short stock *and* long stock, it will negate to nothing and I will have an unwanted stock position after expiration.

$500 is always the magic number: If the stock lands right at the strike number, I will often buy my short calls back for assignment risk. Remember, selling calls gives the buyer the right to exercise them; I have no choice, and I get assigned on them. In a name like AAPL, paying even $.50 is not too much. I would rather pay $50 per 1 lot to buy back my short calls than *not know* whether I will be assigned to short stock against my position. The last thing I want is short 100 shares of AAPL of $53,000 per 1 lot of calls on Monday with no protection.

Below $500: $.01–$499.99: The AAPL calls will be worthless and, using our table, after expiration the calls will leave no stock position. If AAPL is trading $498, I will buy the short 500 calls for $.01 or even $.05 to make sure no news after the bell could make the stock jump above the $500 level.

So, the difference between $499.99 and $500.01 ($.02) is the difference between short stock and having no position, so it is very important to understand (see Figure 16.2).

FIGURE 16.2 Short AAPL Nov 500 Calls for $5.00

- $499.99 or below: Cover short 500 call for assignment risk.
- $500.00: Cover short 500 call for assignment risk.
- $500.01 or above: Buy the AAPL November 500 calls or buy stock.

Long Put—Long the MSFT November 27 Puts

Above $27: $27.01–unlimited, same result: The MSFT puts will be worthless and, using our table, after expiration the puts will have no value.

$27 is always the magic number: If the stock lands right at the strike number, I will choose *not* to exercise my puts—waste of commissions.

Below $27: $.01–$26.99: The MSFT puts will convert to short stock and I can either sell the $27 puts outright or buy stock against the puts that will convert to short stock. If I am long stock *and* short stock, it will negate to nothing and I will have an unwanted stock position after expiration.

So, the difference between $26.99 and $27.01 ($.02) is the difference between short stock and having no position, so it is very important to understand (see Figure 16.3).

- $27.01 or above: Nothing to do.
- $27: Nothing to do.
- $26.99 or below: Sell the MSFT November 27 puts or buy stock.

FIGURE 16.3 Long MSFT Nov 27 Puts for $.50

Short Put—Short the GOOG November 650 Puts

Above $650: $650.01–unlimited, same result: The GOOG puts will be worthless and, using our table, after expiration the puts will leave no stock position.

$650 is always the magic number: If the stock lands at the strike number, I will often buy my short puts back to avoid giving someone the right to exercise these puts. Remember, selling puts means giving the buyer the right to exercise them; I have no choice, I get assigned on them. In a name like GOOG, paying even $.50 is not too much. I would rather pay $50 per 1 lot to buy back my short puts than *not know* whether I will be assigned to long stock against my position. The last thing I want is long 100 shares of GOOG of $65,000 per 1 lot of puts on Monday with no protection.

Below $650: $.01–$649.99: The GOOG puts will convert to long stock and I can either buy the $650 puts outright or sell stock against the puts that will convert to long stock. If I am long stock *and* short stock, it will negate to nothing and I will have an unwanted stock position after expiration.

So, the difference between $649.99 and $650.01 ($.02) is the difference between long stock and having no position, so it is very important to understand (see Figure 16.4).

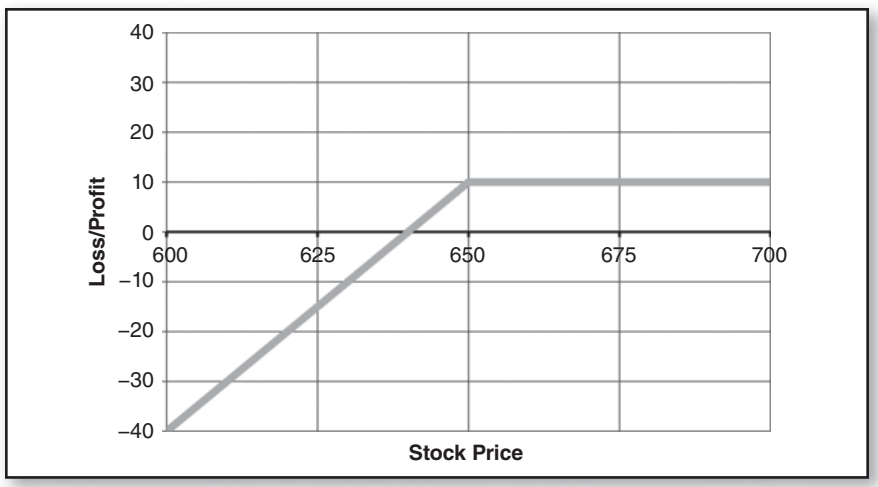

FIGURE 16.4 Short GOOG Nov 650 Puts for $10.00

- $650.01 or above: Cover short 650 puts for assignment risk.
- $650: Cover short 650 puts for assignment risk.
- $649.99 or below: Buy the GOOG November 650 puts or sell stock.

More Complex Trades

Now that we have gone back and forth, we can look at more complex strategies such as put and call spreads. After these, we will look at straddles, strangles, call and put butterflies, and condors.

In calls and puts as *single* strategies, there are two levels to look at. But in call and put *spreads* we must look at three different levels. Remember that in managing these trades on expiration, more important than whether the trade is profitable, I must manage it so that after expiration I am not left with any stock position.

Long Call Spread—Long the FB November 23-25 Call Spread

Long the FB November 23 calls and short the November 25 calls for a debit.

Under $23: $.01–$22.99, same result as long calls: The FB November 23 calls will be worthless and the FB November 25 calls will be worthless as well, so, using our table, after expiration the calls will leave no stock position.

$23 is always one of the magic numbers: If the stock lands right at the strike number, I will choose *not* to exercise my calls—waste of commissions.

Above $23 and below $25: $23.01–$24.99: The FB November 23 calls will convert to long stock; the 25 calls will be worthless, so I can either sell the $23 calls outright or sell stock against the calls that will convert to long stock. If I am long stock *and* short stock, it will negate to nothing and I will have an unwanted stock position after expiration. Once again, if FB is hovering at $24.90, I might buy the 25 calls for $.01 to make sure I do not get assigned on any calls after the bell on pending news.

Above $25: $25.01–unlimited: The FB November 23 calls will convert to long stock; the 25 calls will convert to short stock. So, if I am long stock *and* short stock, it will negate to nothing and I will have an unwanted stock position after expiration.

FIGURE 16.5 Long FB Nov 23-25 Call Spread for $.50

So, the breakdown of two pennies is important once again (see Figure 16.5):

- $22.99 or below: Nothing to do.
- $23: Do *not* exercise the FB 23 calls.
- $23.01–$24.99: Sell the FB 23 calls or sell stock.
- $25.01 or above: Sell the FB 23 calls or sell stock; buy the FB 25 calls for assignment risk.

Short Call Spread—Short the AAPL November 500-520 Call Spread

Short the AAPL November 500 calls and long the November 520 calls for a credit.

Below $500: $.01–$499.99: The AAPL November 500 calls will be worthless and the AAPL November 520 calls will be worthless as well. Using our table, after expiration the calls will leave no stock position. If AAPL is trading $498, I will buy the short 500 calls for $.01 or even $.05 to make sure no news after the bell could make the stock jump above the $500 level.

$500 is always the magic number: If the stock lands right at the strike number, I will often buy my short puts back in order to give someone

the right to exercise these calls. Remember, selling puts means giving the buyer the right to exercise them; I have no choice, I get assigned on them. In a name like AAPL, paying even $.50 is not too much. I would much rather pay $50 per 1 lot to buy back my short calls than *not know* if I will be assigned to short stock against my position. The last thing I want is short 100 shares of AAPL of $53,000 per 1 lot of calls on Monday with no protection.

Above $500 and below $520: $500.01–$519.99: The AAPL short 500 calls will convert to short stock and the 520 calls I am long will be worthless. I can either buy the AAPL November 500 calls outright or buy stock against the calls that will convert to short stock. If I am short stock *and* long stock, it will negate to nothing and I will have an unwanted stock position after expiration.

Above $520: $520.01–unlimited: The short AAPL November 500 calls will convert to short stock and the long 520 calls will convert to long stock, so if I am short stock *and* long stock, it will negate to nothing and I will have an unwanted stock position after expiration.

So, the breakdown of two pennies is important once again (see Figure 16.6):

- $499.99 or below: Buy the short AAPL November 500 calls for assignment risk.
- $500: Buy the short AAPL November 500 calls for assignment risk.

FIGURE 16.6 Short AAPL Nov 500-520 Call Spread for $5.00

- $501.01–$519.99: Buy the short AAPL 500 calls or buy stock.
- $520: Exercise the 520 calls to offset short stock on the short AAPL November 500 calls.
- $520.01 or above: Nothing to do.

Long Put Spread—Long the MSFT November 27-25 Put Spread

Long the MSFT November 27 puts and short the November 25 puts for a debit.

Above $27: $27.01–unlimited, same result: The long MSFT 27 puts and the short MSFT 25 puts will be worthless and, using our table, after expiration the puts will leave no stock position.

$27 is always the magic number: If the stock lands right at the strike number, I will choose *not* to exercise my puts—waste of commissions.

Below $27 and above $25: $25.01–$26.99: The long MSFT 27 puts will convert to short stock and the short 25 short will be worthless. I can either sell the $27 puts outright or buy stock against the puts that will convert to short stock. If I am long stock *and* short stock, it will negate to nothing and I will have an unwanted stock position after expiration.

$25 is always the magic number: If the stock lands right at the strike number, I will buy the short MSFT November 25 puts for assignment risk.

Below $25: $.01–$24.99: The long MSFT November 27 puts will convert to short stock; the 25 puts will convert to long stock, so if I am short stock *and* long stock, it will negate to nothing and I will have an unwanted stock position after expiration.

So, the breakdown of two pennies is important once again (see Figure 16.7):

- $27.01 or above: Nothing to do.
- $27: Choose *not* to exercise the 27 puts.
- $25-$26.99: Sell the MSFT 27 puts or buy stock and buy the short MSFT November 25 puts for assignment risk.
- $24.99 or below: Nothing to do.

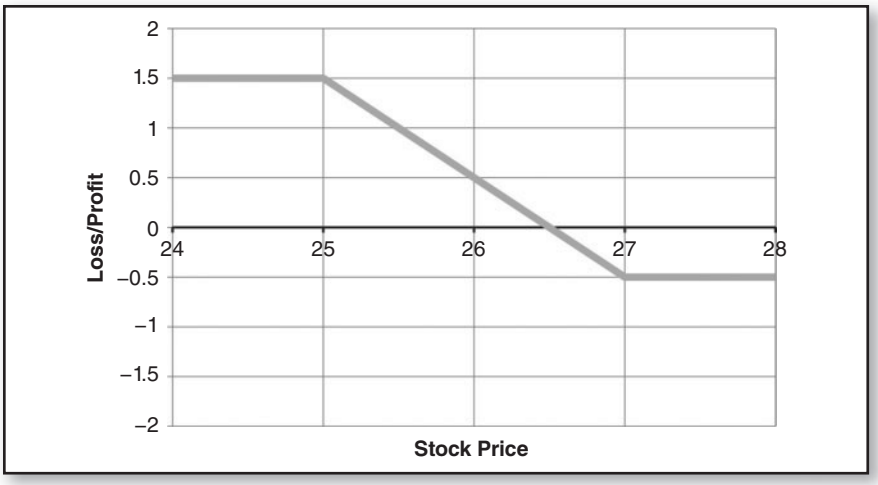

FIGURE 16.7 Long MSFT Nov 27-25 Put Spread for $.50

Short Put Spread—Short the GOOG November 650-630 Put Spread

Short the GOOG November 650 puts and long the November 630 puts for a credit.

Above $650: $650.01–unlimited, same result: The short GOOG 650 puts and the long GOOG 630 puts will be worthless and, using our table, after expiration the puts will leave no stock position.

$650 is always the magic number: If the stock lands right at the strike number, I will often buy my short puts back in order to give someone the right to exercise them. Remember, selling puts means giving the buyer the right to exercise them; I have no choice, I get assigned on them. In a name like GOOG, paying even $.50 is not too much. I would rather pay $50 per 1 lot to buy back my short puts than *not know* if I will be assigned to long stock against my position. The last thing I want to be long 100 shares at GOOG at $65,000 per 1 lot of puts on Monday with no protection.

Below $650 and above $630: $630.01–$649.99: The short GOOG 650 puts will convert to long stock and the short 630 put will be worthless. I can either buy the $650 puts outright or sell stock against the puts that will convert to long stock. If I am long stock *and* short stock, it will negate to nothing and I will have an unwanted stock position after expiration.

FIGURE 16.8 Short GOOG Nov 650-630 Put Spread for $10.00

Below $630: $.01–$629.99: The short GOOG November 650 puts will convert to long stock the long 630 puts will convert to short stock, so if I am long stock *and* short stock, it will negate to nothing and I will have an unwanted stock position after expiration.

So, the breakdown of two pennies is important once again (see Figure 16.8):

- $650.01 or above: Buy the short GOOG November 650 puts for assignment risk.
- $650: Buy the short GOOG November 650 puts for assignment risk.
- $630.01–$649.99: Buy the GOOG 650 puts or sell stock.
- $630: Exercise the GOOG 630 puts to offset the 650 puts that will be long stock.
- $629.99 or below: Nothing to do.

Long Straddle—Long the FB Nov 23 Straddle

Long the FB November 23 calls and long the November 23 puts for a debit. On straddles and strangles, since the options can expire above or below the strike price, we have to look at three levels.

Under $23: $.01–$22.99: The long FB 23 calls will be worthless, but the long 23 puts will convert to short stock, so, I could either buy stock or sell the 23 puts. If I am short stock *and* long stock, it will negate to nothing and I will have an unwanted stock position after expiration.

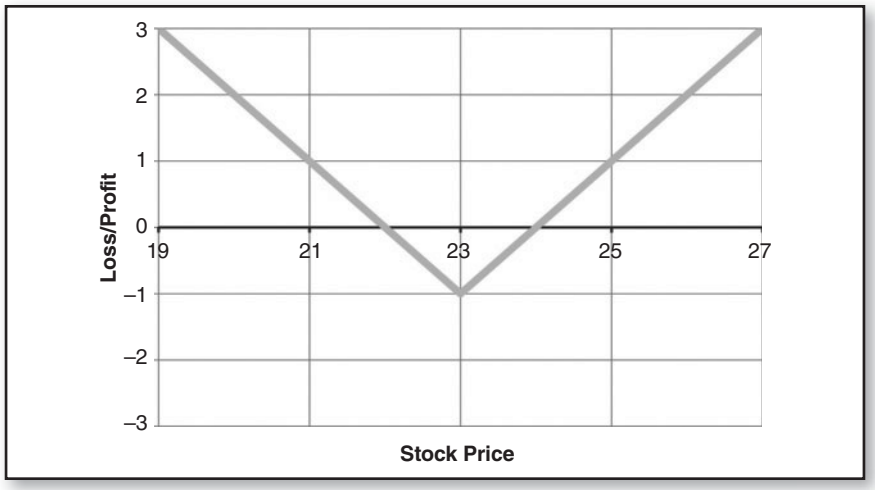

FIGURE 16.9 Long FB Nov 23 Straddle for $1.00

$23 is always the magic number: If the stock lands right at the strike number, I will choose *not* to exercise my calls or puts—waste of commissions.

Above $23: $23.01–unlimited: The FB November 23 calls will convert to long stock and the FB November 23 puts will be worthless. I can either sell the $23 calls outright or sell stock against the calls that will convert to long stock. If I am long stock *and* short stock, it will negate to nothing and I will have an unwanted stock position after expiration.

So, the difference between $22.99 and $23.01 ($.02) is the difference between short stock position and long stock, so it is very important to understand (see Figure 16.9).

- $22.99 or below: Sell the FB 23 puts or buy stock.
- $23.00: Nothing to do.
- $23.01 or above: Sell the FB 23 calls or sell stock.

Short Straddle—Short the MSFT November 27 Straddle

Short the MSFT November 27 calls and short the November 27 puts for a credit. On straddles and strangles, since the options can expire above or below the strike price, we have to look at three levels.

Under $27: $.01–$26.99: The short MSFT November 27 calls will be worthless, but the short 27 puts will convert to long stock, so, I could either sell

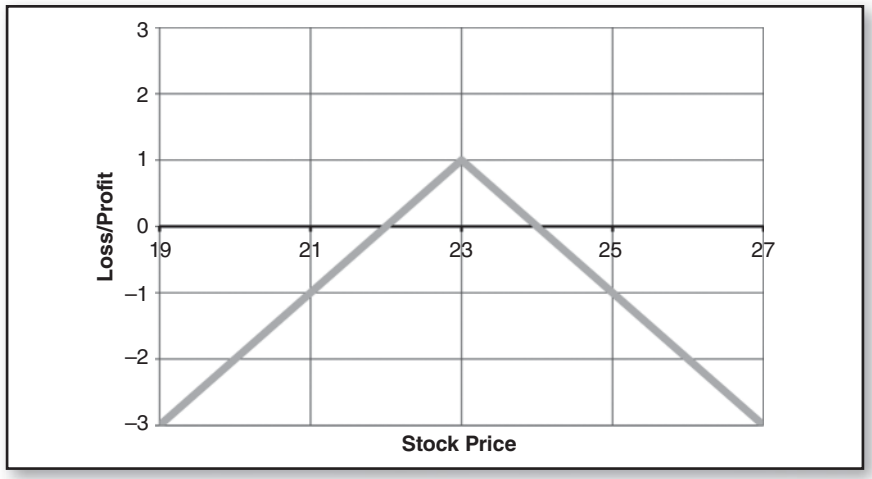

FIGURE 16.10 Short MSFT Nov 27 Straddle for $1.00

stock or buy the 27 puts. If I am long stock *and* short stock, it will negate to nothing and I will have an unwanted stock position after expiration.

$27 is always the magic number: If the stock lands right at the strike number, I will buy both options in order to make sure I do not get assigned on either the 27 calls or puts.

Above $27: $27.01–unlimited: The short MSFT November 27 calls will convert to short stock and the short MSFT November 27 puts will be worthless. I can either buy the $27 calls outright or buy stock against the calls that will convert to short stock. If I am short stock *and* long stock, it will negate to nothing and I will have an unwanted stock position after expiration.

So, the difference between $26.99 and $27.01 ($.02) is the difference between long stock position and short stock, so it is very important to understand (see Figure 16.10).

- $26.99 or below: Buy the MSFT 27 puts or sell stock.
- $27.00: Buy the 27 calls and 27 puts for assignment risk.
- $27.01 or above: Buy the MSFT 27 calls or buy stock.

Long Strangle—Long the AAPL November 480-500 Strangle

Long the AAPL November 480 puts and long the AAPL November 500 calls for a debit. On straddles and strangles, since the options

can expire above or below the strike price, we have to look at three levels.

Under $480: $.01–$479.99: The long AAPL 480 puts will convert to short stock, so, I can either buy stock or sell the 480 puts and the AAPL 500 calls will be worthless.

$480 is always one of the magic numbers: If the stock lands right at the strike number, I will choose *not* to exercise my puts—waste of commissions.

Between $480 and $500: $480.01–$499.99: The long AAPL 480 puts will be worthless and the AAPL 500 calls will be worthless.

$500 is always the other magic number: If the stock lands right at the strike number, I will choose *not* to exercise my calls—waste of commissions.

Above $500: $500.01–unlimited: The long AAPL 480 puts will be worthless, but the AAPL 500 calls will be converted to long stock, so I can either sell stock or sell the 500 calls.

So, the difference between $479.99 and $480.01 and the difference between $499.99 and $500.01 ($.02) is the difference between short stock position and long stock, so it is very important to understand (see Figure 16.11).

- $479.99 or below: Sell the AAPL 480 puts or buy stock.
- $480–$500: Nothing to do. *Do not* exercise either option.
- $500.01 or above: Sell the AAPL 500 calls or sell stock.

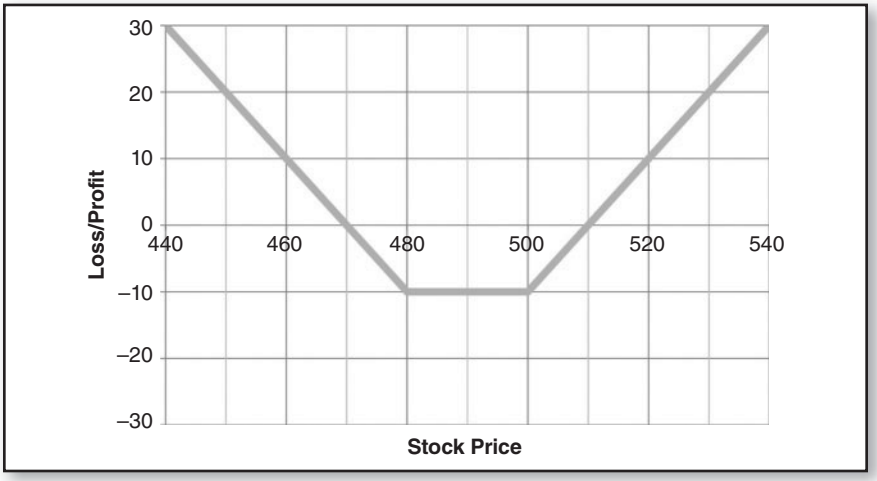

FIGURE 16.11 Long AAPL 480 Put–500 Call Strangle for $10.00

Short Strangle—Sell the GOOG November 650-670 Strangle

Short the GOOG November 650 puts and short the GOOG November 670 calls for a credit.

Above $670: $670.01–unlimited: The short GOOG 650 puts will be worthless, but the short GOOG 670 calls will be converted to short stock, so, I can either buy stock or buy the 670 calls.

$670 is always one of the magic numbers: If the stock lands right at the strike number, I will buy the 670 calls to avoid assignment risk.

Between $650 and $670: $650.01–$669.99: The short GOOG November 650 puts will be worthless and the short the 670 calls will be worthless. I might buy the short strangle in again for pennies to avoid assignment risk.

$650 is always the other magic number: If the stock lands right at the strike number, I will buy the 650 puts to avoid assignment risk.

Below $650: $.01–$649.99: The short GOOG 650 puts will be converted to long stock, so, I can either buy the 650 puts or sell stock. The short GOOG 670 calls will be worthless.

So, the difference between $649.99 and $650.01 and the difference between $669.99 and $670.01 ($.02) is the difference between short stock position and long stock, so it is very important to understand (see Figure 16.12).

- $649.99 or below: Buy the GOOG 650 puts or sell stock.
- $650: Buy the short GOOG 650 puts for assignment risk.

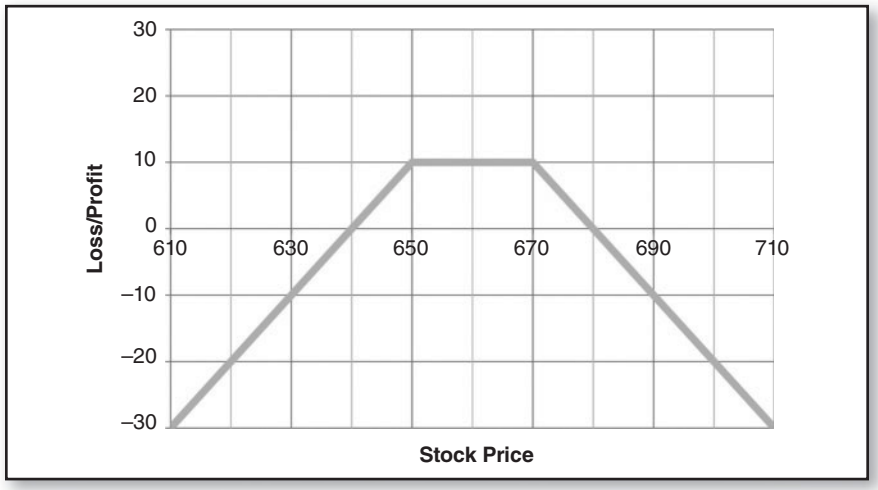

FIGURE 16.12 Long GOOG 650 Put–670 Call Strangle for $10.00

- $650.01–$669.99: Buy the 650 put–670 call strangle for assignment risk.
- $670: Buy the GOOG 670 calls for assignment risk.
- $670.01 or above: Buy the GOOG 670 calls or buy stock.

Short Iron Condor—Selling the FB November 23-21 Put Spread and Selling the FB November 25-27 Call Spread

When I trade out-of-the-money condors, I only sell them, and never buy them, so I will only talk about managing short condors on expiration. Since there are four options, I know have five levels I need to manage.

Sell the FB November 23 puts and short the FB November 25 calls. Long the FB November 21 puts and 27 calls.

Under $21: $.01–$20.99: The long FB 21 puts will be short stock, but the short 23 puts will convert to long stock, so, the short stock *and* long stock will negate to nothing and I will have an unwanted stock position after expiration. Both the short FB November 25 calls and long FB November 27 calls will be worthless.

$21 is always the magic number: If the stock lands right at the strike number, I will exercise the puts to offset the 23 puts that will convert to short stock.

Between $21 and $23: $21.01–$22.99: The long FB 21 puts will be worthless, but the short 23 puts will convert to long stock. Both the short FB November 25 calls and long FB November 27 calls will be worthless. I need to sell stock or buy the FB November 23 puts.

$23 is always the magic number: If the stock lands right at the strike number, I will buy the 23 puts for assignment risk.

Above $23 and below $25: $23.01–$24.99: The short FB November 23 puts, the long November 21 puts, the short FB November 25 calls, and the long FB November 27 calls will all be worthless. If the stock is close to $23 or $27, I might cover those options for assignment risk.

$25 is always the magic number: If the stock lands right at the strike number, I will buy the $25 calls for assignment risk.

Between $25 and $27: $25.01–$26.99: The short FB November 23 puts and the long November 21 puts will be worthless. The short FB

November 25 calls will convert to short stock, so, I need to buy stock or buy the FB November 25 calls and the long FB November 27 calls will be worthless.

$27 is always the magic number: If the stock lands right at the strike number, I will exercise the 27 calls to offset the short stock from the short 25 calls.

Above $27: $27.01–unlimited: The short FB November 23 puts and the long November 21 puts will be worthless. The short FB November 25 calls will convert to short stock, and the long FB November 27 calls will be long stock, so the positions will negate and I have nothing to do.

The difference between $22.99 and $23.01 ($.02) is the difference between short stock position and long stock; hence, this is obviously very important to understand (see Figure 16.13).

- $20.99 or below: Nothing to do.
- $21.01–$22.99: Sell stock or possibly buy the FB November 23 puts for assignment risk.
- $23: Buy the short November 23 puts for assignment risk.
- $23.01–$24.99: Nothing to do (possibly buy assignment risk).
- $25–$26.99: Buy the FB November 25 Calls for assignment risk.
- $27: Exercise the 27 calls to offset the short 25 calls that will convert to short stock.
- $27.01 or above: Nothing to do.

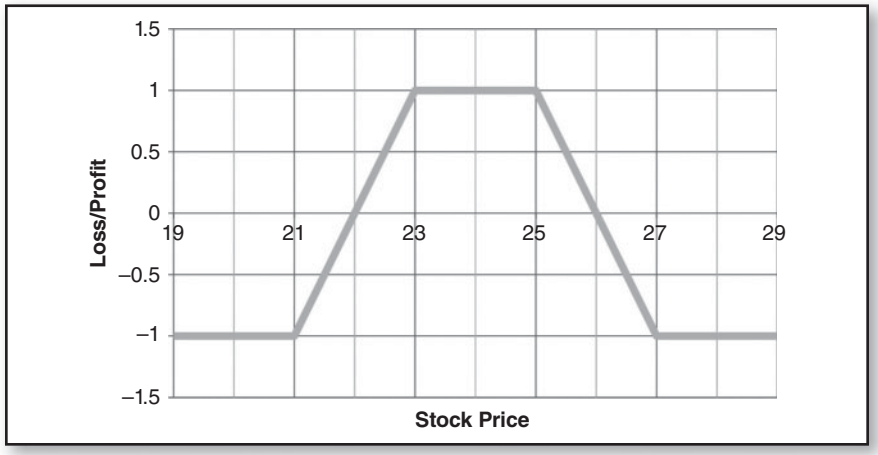

FIGURE 16.13 Short FB 23-21 Put Spread–Short 25-27 Call Spread for $1.00

Short Condor—Short the MSFT November 27 Straddle and Long the 25 Put–29 Call Strangle

Sell the MSFT November 27 puts and short the MSFT November 27 calls. Long the MSFT November 25 puts and long the November 29 calls for a debit.

Under $25: $.01–$24.99: The long MSFT 25 puts will be short stock, but the short 27 puts will convert to long stock, so, the short stock *and* long stock will negate to nothing and I will have an unwanted stock position after expiration. Both the short MSFT November 27 calls and long MSFT November 29 calls will be worthless.

$25 is always the magic number: If the stock lands right at the strike number, I will exercise the MSFT November 25 puts to offset the long stock from the short MSFT November 27 puts.

Between $25 and $27: $25.01–$26.99: The long MSFT 25 puts will be worthless, but the short 27 puts will convert to long stock. Both the short MSFT November 27 calls and the long MSFT November 29 calls will be worthless. I need to sell stock or buy the MSFT November 27 puts.

$27 is always the magic number: If the stock lands right at the strike number, I will buy the 27 puts and calls for assignment risk.

Between $27 and $29: $27.01–$28.99: The long MSFT November 25 puts and the short November 27 puts will be worthless. The short MSFT November 27 calls will convert to short stock, so I need to buy stock or buy the MSFT November 27 calls and the long MSFT November 29 calls will be worthless.

$29 is always the magic number: If the stock lands right at the strike number, I will exercise my long MSFT November 29 calls to offset the short November 27 calls or short stock.

Above $29: $29.01–unlimited: The short MSFT November 27 puts and the long November 25 MSFT puts will be worthless. The short MSFT November 27 calls will convert to short stock and the long MSFT November 29 calls will be long stock, so the positions will negate and I have nothing to do.

So, the difference between $24.99 and $25.01 ($.02) is the difference between short stock position and long stock, so it is very important to understand (see Figure 16.14).

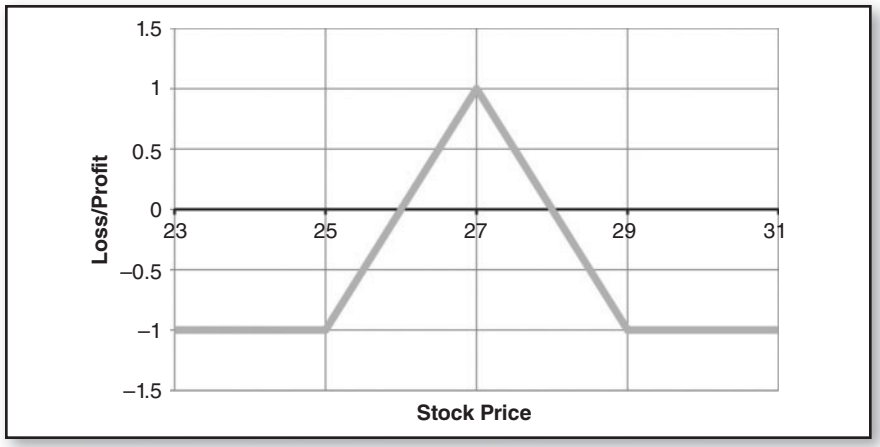

FIGURE 16.14 Short MSFT Nov 27 Straddle, Long MSFT 25 Put–29 Call Strangle for $1.00 Total Credit

- $24.99 or below: Nothing to do.
- $25: Exercise the MSFT November 25 puts to offset the short MSFT November 27 puts.
- $25.01–$26.99: Sell stock or buy the MSFT November 27 puts.
- $27: Buy the 27 calls and puts for assignment risk.
- $27.01–$28.99: But stock or buy the MSFT November 27 calls.
- $29: Exercise the MSFT November 29 calls to offset the short MSFT November 27 calls.
- $29.01 or above: Nothing to do.

Long Call Butterfly—Long the FB November 23-25-27 Call Fly

In call and put fly situations, since there are four options, we need to look five different price levels.

Buy the FB November 23 calls and short twice as many the FB November 25 calls and long the FB November 27 calls.

Under $23: $.01–$22.99: The FB November 23 calls, the FB November 25 calls, and the FB November 27 calls will all be worthless.

$23 is always one of the magic numbers: If the stock lands right at the strike number, I will choose *not* to exercise my calls—waste of commissions.

Above $23 and below $25: $23.01–$24.99: The FB November 23 calls will convert to long stock, the FB November 25 calls will be worthless, and the FB November 27 calls will also be worthless. So, I can either sell the 23 calls outright or sell stock against the calls that will convert to long stock. If I am long stock *and* short stock, it will negate to nothing and I will have an unwanted stock position after expiration. Once again, if FB is hovering at $24.90, I might buy the 25 calls for $.01 to make sure I do not get assigned on any calls after the bell on pending news.

$25 is always one of the magic numbers: If the stock lands right at the strike number, I will buy the $25 calls for assignment risk.

Above $25 and below $27: $25.01–$26.99: The FB November 23 calls will convert to long stock, the 25 calls will convert to short stock twice, and the long FB November 27 calls will be worthless, so, if I am long stock *and* short stock twice, I will need to buy *1*, if not both, FB November 25 calls or buy stock.

$27 is always one of the magic numbers: If the stock lands right at the strike number, I will choose *not* to exercise my calls—waste of commissions.

Above $27: $27.01–unlimited: The FB November 23 calls will convert to long stock, the 25 calls will convert to short stock twice, and the long FB November 27 calls will convert to long stock, so I have long stock twice, short stock twice, and nothing to do.

So, the breakdown of two pennies is important once again (see Figure 16.15):

- $22.99 or below: Nothing to do.
- $23: Do *not* exercise calls—waste of money.
- $23.01–$24.99: Sell the FB 23 calls or sell stock.
- $25: Sell the FB 23 calls or sell stock and buy FB November 25 calls for assignment risk.
- $25.01–$26.99: Buy *1*, but not both, FB November 25 calls or buy stock once.
- $27: Exercise the 27 calls to offset the short November 25 calls, which will be short stock.
- $27.01 and above: Nothing to do.

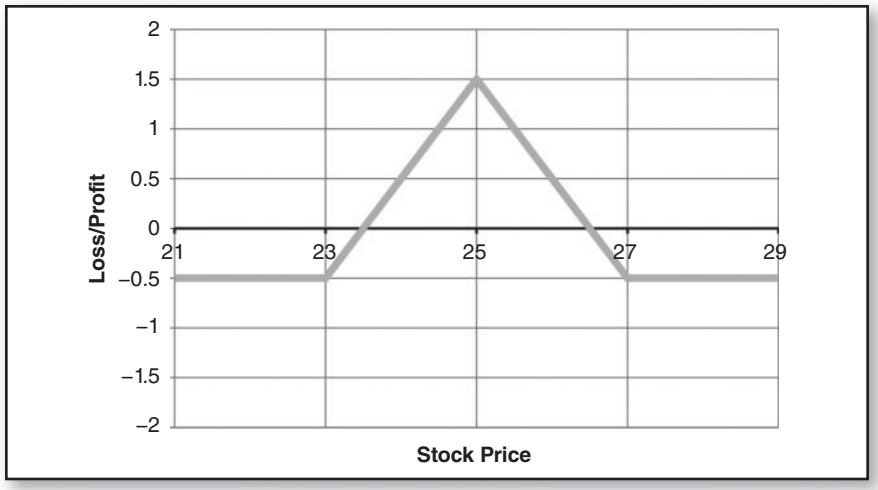

FIGURE 16.15 Long FB Nov 23-25-27 Call Butterfly for $.50

Long Put Butterfly—Long the MSFT November 27-25-23 Put Fly

Buy the MSFT November 27 puts and short twice as many MSFT November 25 puts and long the MSFT November 23 puts.

Above $27: $27.01–unlimited: The MSFT November 27 puts, the MSFT November 25 puts, and the MSFT November 27 puts will all be worthless.

$27 is always one of the magic numbers: If the stock lands right at the strike number, I will choose *not* to exercise my calls—waste of commissions.

Above $25 and below $27: $25.01–$26.99: The MSFT November 27 puts will convert to short stock, the MSFT November 25 puts will be worthless, and the MSFT November 23 puts will also be worthless. So, I can either sell the $27 puts outright or buy stock against the puts that will convert to short stock. If I am long stock *and* short stock, it will negate to nothing and I will have an unwanted stock position after expiration. Once again, if MSFT is hovering at $25.10, I might buy the 25 puts for $.01 to make sure I do not get assigned on any calls after the bell on pending news.

$25 is always one of the magic numbers: If the stock lands right at the strike number, I will buy the 25 puts for assignment risk.

Below $25 and above $23: $23.01–$24.99: The MSFT November 27 puts will convert to short stock, the 25 puts will convert to long stock twice, and the long MSFT November 23 puts will be worthless, so, if I

am short stock *and* long stock twice, I will need to buy *1*, but not both, MSFT November 25 puts or sell stock once.

$23 is always one of the magic numbers: If the stock lands right at the strike number, I will exercise my November 23 puts to offset my short November 25 puts or long stock.

Below $23: $.01–$22.99: The MSFT November 27 puts will convert to short stock, the 25 puts will convert to long stock twice, and the long MSFT November 23 puts will convert to short stock, so I have short stock twice, long stock twice, and nothing to do.

So, the breakdown of two pennies is important once again (see Figure 16.16):

- $27.01–unlimited: Nothing to do.
- $27: Do *not* exercise puts—waste of money.
- $25.01–$26.99: Sell the MSFT 27 puts or buy stock.
- $25: Sell the MSFT 27 puts or buy stock; and buy the MSFT November 25 puts for assignment risk.
- $23.01–$24.99: Buy *1*, but not both, MSFT November 25 puts or sell stock once.
- $23: Exercise the November 23 puts in order to offset my short November 25 puts or long stock.
- $22.99 or below: Nothing to do.

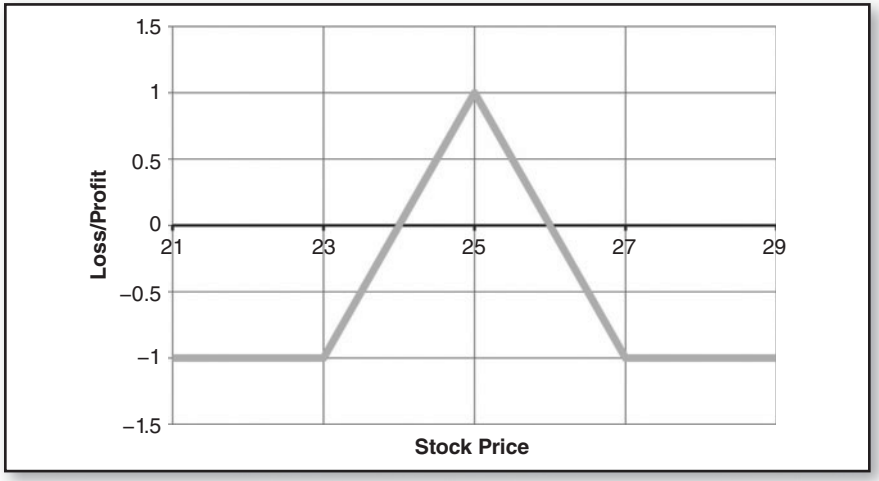

FIGURE 16.16 Long MSFT Nov 27-25-23 Put Butterfly for $1.00

Questions

1. If traders do not manage their positions it is possible to turn small risk levels to large risk levels.
   a. True
   b. False
2. One of the best ways to stay profitable with trading is to use the _____?
   a. First in – First out method
   b. High risk/Low risk level
   c. Buy and hold method
   d. The *OCRRBTT* and *HIMCRRBTT* Trading Plan
3. The most important time of the trading week is Friday at 2:45 CST.
   a. True
   b. False
4. Buying options for a penny or 5 cents can be a profitable plan if _____?
   a. There is a merge announced after the close
   b. There is a FDA announcement after the close
   c. There is news after the close
   d. All of the above
5. One of the best trading scenarios is to be short 100 shares of AAPL at the beginning of the trading week without any protection of the position.
   a. True
   b. False
6. If the stock price is trading above a short call strike price after expiration then short call will convert to _____?
   a. Long stock
   b. Short stock
   c. Worthless
   d. Next week's weekly option
7. If a stock is trading under a long calls strike price after expiration then the long call will convert to _____?
   a. Long stock
   b. Short stock
   c. Worthless
   d. Next week's weekly option
8. If a stock is trading under a long put strike price after expiration then the long put will convert to _____?
   a. Long stock
   b. Short stock
   c. Worthless
   d. Next week's weekly option

Questions (*Continued*)

9. If a stock is trading under a short put strike price after expiration then the short put will convert to _____?
   - **a.** Long stock
   - **b.** Short stock
   - **c.** Worthless
   - **d.** Next week's weekly option
10. A difference between $.02 in the stock price on expiration Friday can determine the difference between an option converting to long stock and being worthless.
   - **a.** True
   - **b.** False
11. It is not important to manage your options positions on expiration, because the clearing firm will make sure that none of your positions convert to stock.
   - **a.** True
   - **b.** False
12. Automatic exercise if a call option is in the money is _____?
   - **a.** $.01
   - **b.** $.05
   - **c.** $.25
   - **d.** $.50

CHAPTER 17

Andrew Keene's Non-Blowout Trading Plan

How Much of Your Portfolio Can You Risk?

Finally, after 16 chapters of options education, we get to my proprietary trading plans, which I have been working on for over 11 years. This is how I have lasted in the world of trading for so long. I have made 30 percent year-over-year on my cash, and netted over $7 million in profits trading equities and equities.

I want to start with a little story from the trading floor about blowout risk.

Trading Pepsi Back in the Day

Early on in my career, I traded PEP (Pepsi) when it was trading between $60 and $70; had it one day opened at $35, I would have lost over $1.5 million. My partner pulled me into the office and said, "What's going on with Pepsi?" I said, "I am short puts, calls, and straddles." He said, "You know, if the stock opens at $35, you lose over $1.5 million, your trading career is over, and you're out of business." I looked at him and laughed. "It won't." Pepsi has

Keene on the Market: Trade to Win Using Unusual Options Activity, Volatility, and Earnings, Andrew Keene.

always been a rock-solid company with few flaws. He said, "What if they find 10 syringes in Pepsi cans in China, it could happen." I said, "You're right, it's not worth it." So, I altered my position and bought about 500 puts for $.10 and then sold about 50 puts for $1, taking my risk down a lot. Did the worst ever happen? No. However, you never know what can happen. I have blown out before and it is no fun. I want to make certain it never happens again.

Going back to my example of protecting myself in AAPL, say the stock is $525 and I want some protection in AAPL. There is some price where you have to say "Enough is enough," and move on to the next trade. This is my raise-my-hands-in-the-air moment where I say, "I'm sorry, you're right." I hope it does not happen very often, but I can always live to see another day. With one click of the mouse I can go from short to flat, flat to long, and long to short. It does not take much effort. So, looking at the AAPL options, an investor could buy the January 450 puts for $45. This $45 is good for 100 shares of stock and offers an 8.5 percent insurance of the total stock price. A $4,500 would protect $52,500 worth of stock now until January. So, an investor could buy these as protection, just like insurance, and if the stock sells off under $450 between now and January, then the investor could sell the stock he was long. This would allow him to sleep at night. If the stock moves back to $1,000 where many people think it can trade, then the investor would just forfeit that 8.5 percent for the put option and would receive all the profits to the upside. I have been saying in my trading room that since the premiums in AAPL are so high, this might be a better candidate as a zero-cost collar, which I will explore as the third way to protect against a long position.

When I was on the trading floor, I used to say I was a cowboy. I often shot first only to ask questions afterwards. The learning curve moving from the trading floor to the upstairs computer screens has been very steep, even for someone with the equity options knowledge and experience that I have. When I was on the trading floor, I rarely ever wrote down risk, reward, breakeven, time, and target for the trades. There was no time for that. The trading floor is a game of speed and the faster the better. Yes, if a floor broker is quoting a combo tied to the stock in AAPL to January 2016, the first thing I would think about is dividend increase and interest rate risk. However, I would rarely sit down and write, "My risk would be $20,000, my reward would be $30,000, and this is why I think I will make money on this trade." So, when I left the trading floor I should have realized that I have plenty of time to slow down. It is fine not to be rushing into orders anymore. There

have been few times in the one-and-a-half years since I left the floor that if I did not make a trade I missed out.

I watch the unusual options activity from the trading floors all day long. I watch thousands of orders hitting the tape as "paper" buys and sells equity options in various classes. Just like every stock has an average volume, options have volume as well. There are over 8,700 stocks; around 3,200 or so have options, and about another 400 more ETFs. I watch paper trade all day long. *Paper* is just an order from a hedge fund, mutual fund, big bank, or big trader. I basically want to be a shark swimming with the whales and trying to mimic their trades. We will go over this in another chapter, but being familiar with what paper is doing and how it affects the stock market is obviously very important.

Now That I'm Upstairs . . .

Now that I have moved upstairs I have come to realize that there is a good chance that I will never make the kind of money I made in 2007 and 2008. Then my P&L swung $30,000 on a daily basis, meaning I could be up or down as much as $150,000 weekly or even $600,000 monthly. Now, trading is more of a grind, trying to find good trades and not forcing other trades where probability and risk versus reward do not line up in my favor. I like to think that I've slowed down a bit, that I no longer shoot from the hip. I've compared myself to a hedge fund manager; while I don't trade with the same funds, I determine my risk tolerance, when to put on a trade, and when to pull the trigger and exit a position. Every single trade I put on in my "trading book" I set up as a risk-versus-reward trade. I also compare myself to a professional sports gambler. I often look at who is playing, how they compete in certain climates, opponents, and then place a bet on it. I am an active trader and often have as many as 60 positions open simultaneously. The bell-shaped curve proves that, over the long run, trading this way ensures that I will be profitable. I can lose money on a daily, weekly, and even monthly basis, but trade with confidence knowing that I am up over 30 percent year-over-year on my portfolio for the past 11 years. Where else can you find this type of return? This is all with 100 percent my own money, never a group position, and not trading with friends' or family's money.

Since moving upstairs I have created "Andrew Keene's Non-Blowout Trading Plan." This simple scale from 1 to 5 rates how *comfortable* I feel with each trade. With this and my two other proprietary trading plans, the

OCRRBTT and the *HIMCRRBTT*, I often am trading many stocks, some of which I do not know what they actually do for a revenue stream. However, if I can make a trade or bet and always define my risk and my reward, I should never be in a situation where I need to transfer money into my account to avoid blowing out. I have to make sure that the trades I put on are not too biased in any one direction—bullish or bearish. Is a bullish trade going in McDonald's (MCD) going to offset a bearish trade in Cisco (CSCO)? Not necessarily, but overexposure in either direction can lead to disaster. My Non-Blowout Trading Plan, shared here for the first time in print, allows me to trade the way I like—many positions, active, and often.

Limiting Your Exposure to a Percentage of Your Total Book

A crucial element of my trading plan is limiting the level that a portfolio is exposed to any single stock or position to 5 percent of its total cash value. To do so, it is best to value trade sizes as an expression of percentage of total book. In other words, calculate how much you are willing to risk before making any trade.

By calculating risk beforehand, you are taking a critical step in keeping your trading less risky and increasing your chances of sustained profitability. If your portfolio is $5,000, then the most you should be thinking of risking is 5 percent of this with any individual position, or 5 percent × $5,000 = $250. A $10,000 account would mean a maximum trade of $500, (5% × $10,000).

If one doesn't carefully consider risk exposure for each trade, these size limits can often be misleading. Following the methodology described above, some may be inclined to think they are able to hold a maximum of 20 positions at any given time (100/5 = 20). This is not true; remember, our 5 percent calculation is based off the risk for any open position. To ensure this strategy is effective, traders must always know their risk for any given position. Let's say I sold the LNKD December 110-115 bear call spread for $1.50. I am trading with a $100,000 account and I want to allocate 5 percent of my book to this trade. Most people would say I could do roughly 32 of these because 32 × 1.50 × 100 = $5,000, 5 percent of the account. This is the wrong way to look at it, because the risk is not the premium amount the call spread is sold for. The actual risk is the *most* a trader could lose on the spread. A $5 call spread could be worth $5 minus the $1.50 it is sold for, a

total risk of $3.50 or $350 per 1 lot, not the amount it is sold for, $1.50. So, to risk $5,000 on this trade, a trader should only sell 5,000/350 = 14, not the 32 first glance would indicate.

I use my Twitter account @KeeneOnMarket to share my thoughts and market commentary with my large Twitter following, often tweeting up to 200 times per day. A college student once e-mailed me after the fact to inform me that after a month of following me on Twitter, he took one of my earnings trades as he noticed I had been very successful in this area. He had sold a call spread in LinkedIn (LNKD). Most of my earnings trades are a 5 according to my Confidence Scale, but LNKD happened to be a 3 so I risked 4 percent of my book and explained this in the trading room. LNKD blew out their earnings number, shooting the $1.50 call spread I sold to $5. The student e-mailed me saying he had gone all in on this particular trade, risking the entire $25,000 in his account and blowing it all out. While I felt bad for him, I lost on the trade but it was only 4 percent of my book. He blew out and lost 100 percent, and because he did not manage risk appropriately, he was done trading. This illustrates the purpose of my Non-Blowout Trading Plan: I will always live to trade another day.

Andrew Keene's Confidence Scale: Ranking Every Trade from 1 to 5

I prefer to not allow any position to reach a point where it is 5 percent of my book. In practice, I use a rating method to give the trades a score of 1 to 5. I call this score my "Confidence Scale." If a trade looks to be somewhat successful, I may rate it at 3 on a scale of 1 to 5 (with 1 being the most confident and 5 being the least confident). If, on the other hand, it is a sure thing, I would rate it at 1. If it is a stock I haven't traded often or that I'm not too familiar with, then I would rate it at 5 on a scale of 5.

This rating system works very well in keeping my ideas for new trades relative to all of the other trades that I have on the books. I keep the rating system in mind when calculating the size of a trade I would like to make, as this dicates the percentage of my book I will risk. To figure out my risk, I often fast-forward to expiration. If today was expiration, then what is the *most* the spread could be worth? I know $5 call spreads or $5 put spreads can only be worth $5. A $10 condor can only be worth $10. Even if implied volatility fluctuates on a daily basis and the stock moves all over the place, the most this trade can be worth is the sum of both the call and the put spread.

Keep in mind equity options are risky, so methods should be used to limit the risk in your account as much as possible. Employing my Confidence Scale will help you manage trade size according to your estimate of the trade's chances for success.

While I would like for every trade to work out perfectly, in reality trading equity options can be very unpredictable. In order to account for this and not simply go around placing bets on any trade that comes to mind with however much money happens to be free in my account, I stick to this method—tried and true.

The process is simple: The higher the confidence level of the trade, the more I am willing to risk on it. When I see a trade that doesn't give me much faith, I might trade it with only .5 percent or perhaps 1 percent of my account. With this method, I am always in the game—good, better, best—and I'm always available to risk something with any trade: I merely adjust the size of the trade to my confidence level.

I could also think of every trade I consider as a hand of Texas Hold 'Em. Let's say I raise a $500 buy-in game to $50 with pocket Jacks, a good hand. The Aggressive Kid raises again to $100; Grandpa sitting in the corner, who tips with quarters and hasn't played a hand in over four hours, re-raises all in for $350. I risked 10 percent of my chips, but it would not be bad for me to fold since one if not both of my opponents will probably beat me. So, even though I lost 10 percent of my chips but I am able to move on to the next hand without looking back since I still have 90 percent of my chips left.

There are many combinations of hands in Texas Hold 'Em and depending on the situation I might want to play many different hands. Similar to trading, if I am trading well and see all the angles, I might take some trades on a speculative play. Hands in Texas Hold 'Em, such as 4, 6 off suit, 5 7 suited, pocket 3s are not top 10 hands, but can be used to win a huge pot off another player. This is similar to out-of-the money calls in a stock that I have never heard off. I might want to take a gamble, but in the long run this type of trading will not be profitable.

I've incorporated this Confidence Scale into my unusual option activity scanner, OptionHacker. OptionHacker is an algorithm-based scanner that provides alerts to unusual activity. While other scanners only show the two or three thousand *unusual activity* trades that come across the tape each day, OptionHacker also applies a rating of 1 to 5 stars based on my criteria, corresponding to the confidence levels outlined above. While no tool or product can guarantee that you are

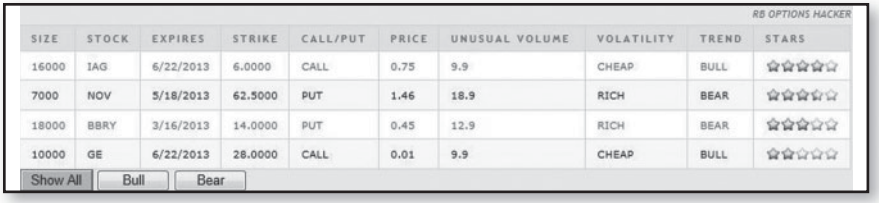

FIGURE 17.1

profitable as a trader, my goal for OptionHacker is to give you the best information possible to provide a basis for making rational trading decisions (see Figures 17.1 and 17.2).

Playing poker is a very similar approach where I want to place many trades that I think will be profitable, but I have to realize that not every trade will be a winner. So, even if a trade looks extremely profitable, I only want to risk a percentage of my trading account on that trade. Just like in poker, in trading, I will always live to see another day.

This is how I always look in trading. Yes, I track my trading performance on a daily basis and send out daily e-mails for members of my trading room. I can usually sense if I am making good decisions, trading right, and setting up good risk versus reward trades. I am not in the business to sell a $1 call spread for $.10, because after commissions that $.10 is actually $.08. Do I want to risk $92 to make $8? No, I want good risk verse reward setups so I can make 50-50 bets where I think the odds are 60-40 in my favor.

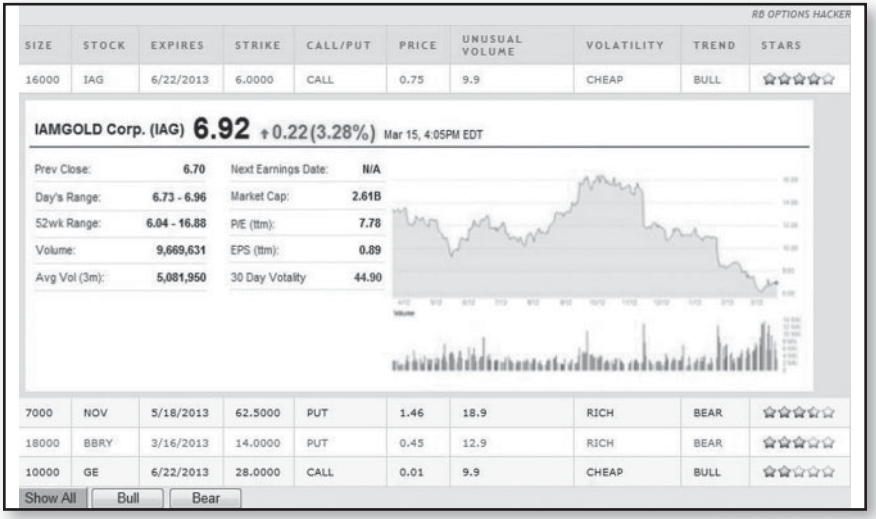

FIGURE 17.2

I want to find a put or call fly that pays 6:1 on my money, but where I feel the odds are closer to 4:1.

I like to carefully read the market. Sometimes I see a signal from the ticker that piques my interest. I might see a large order come across the ticker, followed by another large order that contradicts what the market is saying. From these trades, I can try to deduce what is going on in the market. These types of trades exemplify what is most fun for me about trading: reading the market, trying to see what others don't, and following what paper is doing.

In this case, I might place a trade knowing something will happen but without being certain as to when or in what quantity. My confidence level in this case might be only at 4 or 5. If my confidence level were at 1, I would put 10 percent of my account at risk in the trade. If I were a bit less sure of capturing the benefit of what I saw by reading paper, I would rate it at 2 and place a trade with 5 percent of my account. Since I trade actively while holding many positions, a trade that is a 1 on the Confidence Scale may only be 10 percent of my trading book.

Meanwhile, I may see an average trade (a "3" or "4") and only risk 2 or 1 percent of my account on it; this may happen several times a day as a I trade in my Live Trading Room.

Trading opportunities appear and disappear, and my opinions often change based on the latest order flow of unusual options activity. I compare myself to a fisherman scattering his poles across a pond; some are in the deep end, where there are bigger fish that rarely bite. Others are in the shallow end, where the fish are average-sized but bite regularly.

I also mix the direction of my trades. If my average confidence level is 5 then my average trade size is 0.5 percent of my account, meaning I can have up to 200 equity options positions on simultaneously. I'm usually spread out much less than 5 percent, or even 2 or 3 percent, of my book. During a typical trading period, rolling from one month to the next, I have trades on of varying complexity—long, short, and almost always risking less than 2 percent of my book on any one trade.

Every Trade Is a Percentage of My Book

One of the key elements to rating your trades is considering the size of the trade relative to the size of your book. This system works regardless of account size because it is based upon percentages. *Percentage* of the

total book is what I look at; I never think of the dollar amount of the trade.

Knowing the size of the trade relative to your account size goes a long way in keeping your account safe and ready to trade the next day. Let's think about what it means for me to risk 1 percent of my book per trade while having 50 open positions on at any one time. This means I would have to be wrong (*50 times in a row*) before my account loses half its value. To carry this one step further, if I follow this philosophy I would have to make a extended series of bad trades before getting to the point where I blow out my account. Fifty trades times percent is 50 percent of my book, but this risk is spread across fifty different trading ideas—long, short, and of varying complexity. By doing this, I have essentially bulletproofed my trading portfolio against blowout risk.

Risk is inherent in trading, especially so with equity options. With so many factors to consider and so many moving parts, learning the ins and outs of the how position size affects a trading portfolio is critical to a traders success. When combined with my Confidence Scale, the result will be a (*rules-based, position size management system*). By matching my trade size to my confidence level, I am able to limit my losses when I am wrong. The system provides a baseline for rating each trade, allowing me to take on many trades at once, in many directions, furthering limiting my blowout risk.

Andrew Keene's Non-Blowout Trading Plan

The rating scale gives a trader like myself the ability to trade many positions, but risk more capital in the trades that I am more confident on. Since I am extremely active trader like to trade multiple positions, I have created Andrew Keene's Non-Blowout Trading Plan.

5: < .5 percent of total book
4: .5–1 percent of total book
3: 1–3 percent of total book
2: 3–5 percent of total book
1: 5–15 percent of total book

Let's look at a couple of real trades I had on last month, and how I can actually lose on the number of trades but still remain profitable. We will say this was working on a $100,000 account.

1. I bought the OPEN November 45-42.5 put spread and sold the 40-37.5 put spread for $.50 risk: $50 per 1 lot:
   Risk: $50 per 1 lot
   Reward: $200 per 1 lot
   Confidence: 4
   I was risking .8 percent of my total account or $800 on this trade. If I were willing to risk $800 on this trade, I could trade a 16 lot (16 × $.50 = $800).
   Result: Stock closed at $42.70, put fly closed at $2.20
   So, my 16-lot order netted profits of $2.20 (Closing price of fly) – $.50 (Price paid of spread) = $1.70 × 16 (lot) =
   Profits: $2,720
   Risk: $800
   Profits/loss: $2,720

2. I bought the CSCO November 16.5-15.5 put spread for $.29:
   Risk: $29 per 1 lot
   Reward: $71 per 1 lot
   Confidence: 5
   I was risking .4 percent of my total account or $435 on this trade. If I were willing to risk $435 on this trade, I could trade a 15 lot (15 × $.35 = $435).
   Result: Stock closed at $17.70, put spread closed at $0
   Loss: $435
   Risk: $435
   Profits/loss: –$435

3. CYOU long November 25-24 put spread, short 23-22 put spread for $.25:
   Risk: $25 per 1 lot
   Reward: $75 per 1 lot
   Confidence: 5
   I was risking .5 percent of my total account or $500 on this trade. If I were willing to risk $500 on this trade, I could trade a 20 lot (20 × $.25 = $500).
   Maximum risk: $500
   Maximum reward: $1,500
   Result: Stock closed at $22.80, spread closed at $.80
   So, my 20-lot order netted profits of $.80 (Closing price of broken wing fly) – $.25 (Price paid of spread) = $.55 × 20 (lot) =
   Profits: $1,100

Risk: $500
Profits/loss: $1,100

4. ANF long November 31-28-25 put butterfly for $.65:
   Confidence: 5
   Maximum risk: $65 per 1 lot
   Maximum reward: $235 per 1 lot
   I was risking .4 percent of my total account or $455 on this trade. If I were willing to risk $455 on this trade, I could trade a 7 lot (7 × $.65 = $455).
   Total risk: $455
   Total reward: $1,645
   Result: Stock closed at $41
   Risk: $455
   Profits/loss: –$455

5. Long M November 41-43-45 call butterfly for $.40:
   Confidence: 5
   Risk: $40 per 1 lot
   Reward: $160 per 1 lot
   I was risking .5 percent of my total account or $480 on this trade. If I were willing to risk $480 on this trade, I could trade a 12 lot (12 × $.40 = $480).
   Maximum risk: $480
   Maximum reward: $1,920
   Results: Stock closed at $40.20, spread went to zero
   Risk: $480
   Profits/loss: –$480

These five trades I put on for earnings yielded two winners and three losers. However, by using the *HIMCRRBTT* Trading Plan (see Chapter 19) to structure my trades the way I do, my profits netted $3,820 and my losses were $1,370. On these five trades I risked $2,670 (note: two winners and three losers), but still netted a profit of $2,450 risking only $2,670, almost 95 percent. Imagine if I'd had three winners and two losers, or even four winners and one loser.

My Confidence Plan is what sets me apart from other traders. Just like in poker, I am not willing to risk the same amount of my total bankroll on every hand. A hand like two Jacks might be worth a percentage of my total

chips, but when I have Aces (or the best trade setup), I have to be confident and push more aggressively. Sticking with this plan has not only helped me be profitable throughout the years, but also keeps me in the game if I am losing money on trades. It ensures I never blow out, which is always the worst nightmare for a trader.

Questions

1. Traders on the floor often think of the Greeks behind a trade.
   a. True
   b. False
2. What is the variable that floor traders think about when setting up a trade?
   a. The Greeks
   b. Dividend increase
   c. Interest rate risk
   d. Risk/reward payoff of the trade
3. What is the main indicator of when "paper" trades?
   a. The price of the options
   b. The volume of the options order
   c. When there are many separate, quick trades
   d. When there is a long order followed by a short order
4. When a trader is working in front of a computer in an office it is often called _____.
   a. Virtual trading
   b. Internet-based trading
   c. Paper trading
   d. Trading upstairs
5. Professional options traders often think the same way as a _____.
   a. Business
   b. Hedge fund manager
   c. Professional gambler
   d. All of the above
6. Proprietary traders trade with _____.
   a. Only their own money
   b. Clients' money
   c. Some of their own money and some of their friends' money
   d. Imaginary money in a demo account

Questions (*Continued*)

7. This book does not talk about which as a trading plan?
   - **a.** The ORCUT
   - **b.** Andrew Keene's Non-Blowout Trading Plan
   - **c.** The *OCRRBTT*
   - **d.** The *HIMCRRBTT*
8. Going long or going short with all of your trades is _____.
   - **a.** A position that can lead to disaster
   - **b.** A position that is too weighted in one direction of the market
   - **c.** A position that is set to make a big profit
   - **d.** All of the above
   - **e.** a and b
9. If a trade is good, then it is best to use all of your assets for a one-shot trade.
   - **a.** True
   - **b.** False
10. The best way to evaluate a trade is to rate it on a Confidence Scale from _____.
    - **a.** 1 to 3
    - **b.** A to B
    - **c.** 1 to 5
    - **d.** Low to high

CHAPTER 18

Andrew Keene's *OCRRBTT* Trading Plan

In options trading you not only need to be well versed in choosing the probable direction of the stock, but you also need a good sense of timing. Once you have somewhat mastered your forecasting directional movement, or lack thereof the stock will go, you can use implied volatility to help you predict the expected range of the stock movement for a given timeframe.

Story of the *OCRRBTT* Trading Plan

The *OCRRBTT* is my proprietary trading plan that I took upstairs from the trading floor and trade with on a daily basis. I literally go through every step very quickly to see if I want to take a trade. When a floor broker comes into the trading pit he has an order, sometimes for a spread. This technique has a learning curve that took me some time to properly master. Every trade is different. Let's talk about floor brokers first. They come into the trading pit representing a firm such as Goldman Sachs, Merrill Lynch, or Morgan Stanley. We know whom they work for, but we never know who their customer is. The big question is: Does their customer hold a position in the stock, or is he speculating with just options? We would know what the floor brokers wanted to do, but not necessarily if their stock position

Keene on the Market: Trade to Win Using Unusual Options Activity, Volatility, and Earnings, Andrew Keene.

was against an options trade. So with every options position that comes into the trading pit, I wonder: Are they representing their actual position or are they disguising it against a stock position that I do not know about? Is the customer buying calls as speculation to the upside or as a hedge against a short stock position? Is the customer buying puts as a speculation to the downside or buying puts to hedge a long stock position?

The hedge fund community has gotten stealthier in disguising their actual activities throughout the years. Let's say a hedge fund knows a stock is going to double in two months on a takeover, are they more clever buying calls naked or buying stock and buying puts as protection? If they buy calls and the stock doubles, that is an immediate red flag to the SEC and not a good situation. However, if they buy stock and profit they can now say, "But, look how much money we lost buying puts—if we knew stock was going higher, we would never have bought them!" This is why I created the *OCRRBTT* Trading Plan and am sharing it in writing for the first time.

Reading Options Paper

Paper buying calls is not always bullish; paper buying puts is not always bearish.

What is *paper?* This just refers to an options trade order. Back in the day, these orders used to be written on actual, physical paper, so this is how the name was derived. Paper just describes a person or organization making orders in the market. Paper could be a hedge fund, or mutual fund, or retail bank, or *big* trader. For example: "Paper bought 3000 XYZ Jul12 32 strike puts for 0.32 cents." *Paper* generalizes the entity making this order. A common misconception with options analysis is that call buying is always bullish and put buying is always bearish. On the contrary, after being on the floor for 11 years I've learned this not the case, and often is the opposite of what the real underlying traders are doing.

When I was on the trading floor, AAPL was my biggest product and I was the biggest trader in the pit. We had a Merrill Lynch customer that would come into the pit, I am not sure who he was, but he would sell around 10,000 $10 put spreads for $3 or so once a week for probably a year straight. What does that mean, if a customer is selling put spreads? He is selling premium or implied volatility and he is getting long deltas. So,

after figuring out what he was doing, I jumped on board with him almost every time and took the same trades he did, selling implied volatility and getting long. This trader was on fire for over a year and a half, just printing money, and using the *OCRRBTT* Trading Plan, I mimicked his position and made money hand-over-fist. But not every stock, or every trade, is this easy.

We had another broker who would come into our trading pit and buy upside calls in WLP. So, the first couple of times this trader bought these calls I would get long deltas. I then noticed that every time the broker bought calls, the stock would actually sell rather than go higher. How could this be, if the broker kept buying upside calls month after month? If the trader was buying calls and the stock sold off, wouldn't this mean that the trader was always losing money? Not necessarily; because the trader could have a short stock position on against his options trade. We never knew if a broker's customer had a stock position against the options trades or not. Like putting a puzzle together, I must determine if each trade is speculative or a hedge against a stock position (as I mentioned in an earlier chapter). This is why it is so important to understand that the learning curve for every stock is different. Remember, if it were easy, then anyone could do it.

What Call and Put Volume Means to a Trader

The hedge fund community has gotten much smarter throughout the years. If they knew a stock would move higher on a merger deal, then they would buy calls outright, correct? Absolutely *not*, because if they bought 5,000 calls for $1 and then they went to $10 within a couple of weeks, this would send a red flag to the SEC. So, a hedge fund would rather buy the stock outright and then buy puts against their stock position. If the stock gaps higher, then if they get red-flagged by the SEC, they could show their losses for the long puts that they purchased.

In a similar way, if a trader knew a stock was going to move lower, then he would be better purchasing calls and selling stock than buying puts outright. The purchase of the puts outright would once again send that red flag to the SEC and the hedge fund or trader could possibly get into huge trouble. However, if the trader sold stock and bought calls, he could show losses in his trading account for all his calls. So, I do not think much about the put/call ratio that many traders trade on.

How Insiders Read Paper

This is pretty much how I have learned to decipher order flow:

Paper buying calls: I estimate this to be a bullish trade around 60 percent of the time. Sometimes paper will buy calls as speculation to the upside, but other times it is to protect a short stock position.

Paper selling calls: I estimate this to be a bullish trade around 50 percent of the time. Sometimes paper sells calls if paper is willing to get short the stock or ETF at a certain level. Other times, it is hedged against a long stock position in order to create an extra dividend stream.

Paper buying puts: I would say this is a bullish trade around 65 percent of the time. Sometimes paper buys puts against a long stock position. I think that most often puts are bought against a long stock position. I have seen huge put buyers into earnings in STZ and JOSB only to see the a huge pop on earnings. Was this paper wrong? We never know a customer's stock position against this trade; it is one of the pieces of the puzzle.

Paper selling puts: I think this is a bullish trade around 75 percent of the time. Sometimes paper sells puts, but not often, against a short stock position. This is my Holy Grail, because very rarely is paper selling puts against a short stock position. Every time I see a huge order on a put seller, my eyes light up and I usually take most of these trades so long as every component of the *OCRRBTT* Trading Plan lines up.

Once I moved off the floor and began trading on the screen upstairs, I began watching two to three thousand unusual options activity trades per day. Many people don't have the time or find it too tedious to stare at a screen to watch this type of order flow just to pick out a handful of good trades. This is why I developed my own scanner to pick out the 20 or 30 daily trades that meet my criteria. With OptionHacker, I'm able to spend more time focused on the trades that *do* warrant my attention rather than hours simply trying to pick them out. Obviously, no tool can guarantee profitability as a trader, but my goal is have the best possible information at my disposal when I do decide to take a trade (see Figures 18.1 and 18.2).

RB OPTIONS HACKER

SIZE	STOCK	EXPIRES	STRIKE	CALL/PUT	PRICE	UNUSUAL VOLUME	VOLATILITY	TREND	STARS
16000	IAG	6/22/2013	6.0000	CALL	0.75	9.9	CHEAP	BULL	☆☆☆☆☆
7000	NOV	5/18/2013	62.5000	PUT	1.46	18.9	RICH	BEAR	☆☆☆☆☆
18000	BBRY	3/16/2013	14.0000	PUT	0.45	12.9	RICH	BEAR	☆☆☆☆☆
10000	GE	6/22/2013	28.0000	CALL	0.01	9.9	CHEAP	BULL	☆☆☆☆☆

Show All | Bull | Bear

FIGURE 18.1

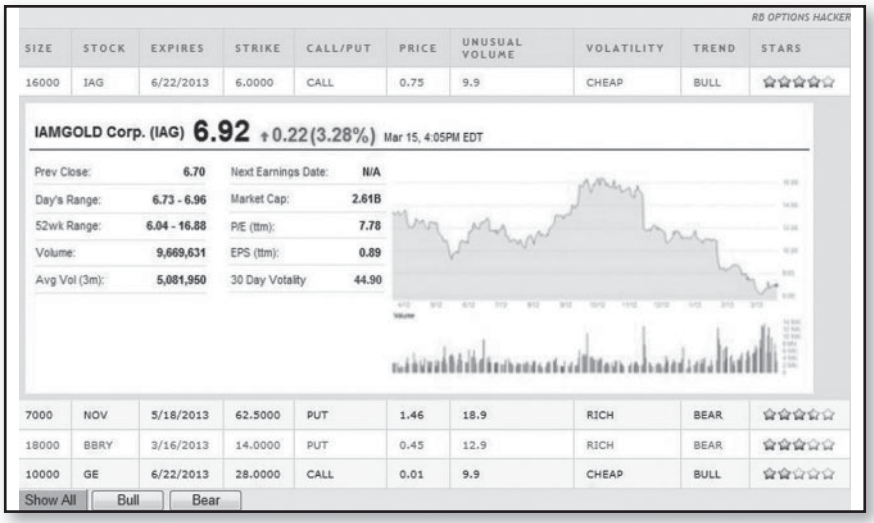

FIGURE 18.2

The key take away from this section is the concept that paper is just an options order. Second, bear in mind that it looks like paper is always *long*! Why is this? For the most part, most mutual funds, hedge funds, and traders are long because in general the stock market tends to trade higher in the long run. This does not work 100 percent of the time—no trading plan does—but there is a good reason that I still trade using the techniques I learned on the trading floor. I moved these techniques upstairs to the trading screens to teach the Live Trading Room what I have learned. These techniques work and that is why I have stuck with this trading plan for over 11 years. One day, I was clerking for one of the best traders I have ever met. A broker came into the pit and asked for a market in (let's say) ZZZ. He made a market and then reacted off the trade. I said, "What does ZZZ do?" He looked at me; "Does it really matter?" This has always stuck with me, because I can make a trade based on the unusual options flow combined with the charts and the risk-versus-reward setup. He was right: It does not matter what the company does.

Using the *OCRRBTT* Trading Plan

O: Options Volume versus Open Interest

I want to trade where the *volume exceeds the open interest*. This helps me stay in options positions where the Smart Money is creating an *opening* position. When the volume of the option traded is *equal* to open interest, this usually signals a *closing* position. In this case, I do not want to take the trade. I do not

care when the Big Money is closing its position, so I often do not take these trades. I just want to initially trade and every trade that is opening should be marked as an *opening trade*.

C: Chart—How Does It Look, Bullish or Bearish?

If criterion one, open interest, has been met, then I will look at the stock's chart. If a trade does not set up well on the chart, I usually won't take that trade. For example, if the chart is bearish but the paper is bullish, I might pass on the trade. The opposite is also true: If the chart is bullish but the trade bearish, I might sit it out as well. There have been many times where I saw call buyers in VALE and XCO as the stock continued to make 52-week lows and the stock was making lower lows and lower highs on the daily chart. If the chart does not line up then I won't progress any further with the trading plan and I'll move on to the next trade. If every time you saw a call purchase discussed on CNBC or Bloomberg TV and assumed the company to be a "takeover candidate," you would go bankrupt because it's common to see 10 per day, 50 per week, and 200 a month. I watch about three thousand equity options trades a day and I usually try to find only the best three to five a day to trade. Sometimes I take trades and sometime I don't. Also, sometimes I see puts being bought and put on a bullish trade, and calls being bought and put on a bearish trade.

One of my favorite chart indicators is the Ichimoku Cloud, or "at a glance chart." I believe that, when used with a daily chart, this is hands down the best indicator to see at "one glance" if the chart is bullish or bearish. I use all five signals from the Ichimoku Cloud in order to trade the best possible buy or sell setups.

R: Risk

With every trade I take, I want to define how much am I willing to risk on a trade. I can look at it as a dollar amount, or as a percentage of my book. I always measure a trade as a *percentage* of my book (as I mentioned in the previous chapter). In other words, I refer to the size of the trade in percentage, and not the dollar amount of the trade.

R: Reward

With every trade I take, I need to make sure my reward lines up. I do not want to take trades where I am selling $1 call spreads for $.10; I try to line up my reward at least at 30 to 35 percent of the spread's price, not 10 percent. This way, I know I'm set to make enough money for the amount of risk that I'm taking. I'm in the business of options trading to make money, not trading simply for trading's sake alone!

B: Breakeven

When I am taking a trade I want to always know my breakeven point and I bias that on the charts, support levels, resistance levels, and moving averages.

T: Time

I want to make sure my timing is right. I usually like to trade the same month that the paper is trading. Sometimes, if I am buying calls outright, I will give the trade a couple more months' time to mature.

Other trades might be one month out, three months out, or even a year out. I have often made trades right after my expiration settled. In other words, if I am right about my target and my thesis, I have to give my trades enough time to pan out. Often, when I follow Big Money into these trades, I will trade the similar expiration that paper order flow is trading. Sometimes, if I see a huge put seller, I will give myself a little more time. But time is money, so the longer I give a trade, the more I will have to pay in time premium.

T: Target

On every trade I have a target I think the stock will reach. Even if my target is wrong, I like to calculate this support, resistance, and previous buying and selling levels in the stock. Often, if I have long calls or long puts, I will start to take profits in the options for two or even three targets, sometimes taking half of the position off at a double and always letting some profits ride for even more profits. Then it won't cloud my judgment when a stock or option position moves immediately in my favor.

Conclusion

I base my trades on the trading plan that I used on the floor to net over $7 million. I have traded over 1 million equity options, so this plan has worked over the past 11 years and I will continue to use it going forward. Most chart technicians say that if you put on a trade based on a chart and it goes against you, you are probably reading the chart the wrong way. This is also true about reading the *OCRRBTT* Trading Plan: If you read the paper the wrong way, then you will put on losing trades. So, in the Live Trading Room, not only do I trade all day long, but I also teach all of the traders in the room how to read all the unusual options activity properly.

Questions

1. Who comes into the trading pits for orders?
   a. Broker for a trading firm
   b. Trader for a trading firm
   c. Trader for a hedge fund
   d. Market maker
2. Why do the hedge funds disguise their positions with options?
   a. For speculation.
   b. They only trade all the time.
   c. They don't.
   d. In order to not get red-flagged by the SEC.
3. Which trader is *not* represented when taking about "paper" on the trading floor?
   a. Hedge fund
   b. Mutual fund
   c. Market maker
   d. Retail bank
4. If paper is buying calls, that means that they are always bullish the stock.
   a. True
   b. False
5. The best indication from "paper" to get me bullish a stock is _____.
   a. Paper selling calls
   b. Paper selling puts
   c. Paper buying calls
   d. Paper buying puts
6. The *O* in the *OCRRBTT* Trading Plan stands for _____.
   a. Obviously
   b. Options volume versus options interest
   c. Oprah
   d. On time
7. A trader like myself thinks that put/call ratio is the best indicator for trading unusual options activity.
   a. True
   b. False
8. When trading the *OCRRBTT* Trading Plan, I always want to make sure that _____.
   a. I have a risk-versus-reward setup
   b. I always have a predetermined timeframe and target(s)
   c. Open interest is greater than volume
   d. I have a strong chart to support my trade
   e. All of the above

Questions (*Continued*)

9. If I see paper making a bullish trade and the chart is bearish, then I usually will not take this trade.
   a. True
   b. False
10. The trade that usually has the best risk-versus-reward setup for the *OCRRBTT* Trading Plan is _____.
   a. Unlimited risk and unlimited reward
   b. Unlimited risk and limited reward
   c. Limited risk and unlimited reward
   d. Limited risk and limited reward
   e. c and d
11. The *OCRRBTT* Trading Plan helps traders mimic what the hedge fund traders are trading.
   a. True
   b. False
12. The *OCRRBTT* Trading Plan helps me with a trade that defines my risk versus reward with a set breakeven.
   a. True
   b. False

CHAPTER 19

Trading Earnings (*HIMCRIBBIT*)

Trading earnings is one of my favorite things to do.

—Andrew Keene

One of the key advantages to options is the ability they provide traders to devise strategies to profit from big stock movement, little stock movement, no stock movement, or movement in either direction.

For more than 11 years I have used the *HIMCRRBTT* (*him-cribbit*) Trading Plan. This systematic trading plan helps me analyze and dissect the best risk-versus-reward trades for any earnings announcement.

Let's look at the first three components of the *HIMCRRBTT* Trading Plan.

HIM: Historical, Implied, Measured

H: Historical Volatility

When analyzing an option trade, the first thing to do is check how much the stock has moved in the past eight quarters. I also place a big emphasis on the previous quarter and the same quarter last year. You can get a good feel for what a stock might do if you first look at the earnings cycle of the company

Keene on the Market: Trade to Win Using Unusual Options Activity, Volatility, and Earnings, Andrew Keene.

and see what the current trend of earnings has been. If I see that a stock has sold off eight straight quarters on earnings, I think there is a better chance it will sell off the *next* quarter as well. If I notice that a stock has rallied big four times on earnings, and sold off four times, but when it sold off it was a small amount, I can devise a strategy accordingly.

I: Implied Volatility

Going into an earnings announcement, the options premiums will be higher, because traders are unsure how much the stock will move on the catalyst. This is clearly seen as the options increase in value going into the announcement. Following the announcement, the volatility component can collapse because the uncertainty is now relieved by the new data presented. To gauge what the implied volatility says about the stock's movement, I look at the *measured move target*. I take the at-the-money (ATM) straddle or the out-of-the-money (OTM) strangle and see what it is currently pricing for the stock's *implied* movement on this earnings announcement. This strategy works much better if there are weekly options; it does not work so well if I have to trade options that do not expire for another three weeks.

I look at the current price of the ATM straddle, the ATM calls, and the ATM puts and add them to get the ATM straddle price. I can take that and divide it by the strike price to get the percentage move that the market makers and big firms are implying the stock will move between now and expiration. If the stock is in between strikes, then I can use the OTM strangle.

For example: If AAPL is trading $670 and the ATM weekly 670 calls are $16.75 and the weekly 670 puts are $16.75, then the ATM straddle is trading $33.50. That means that the big firms are implying that AAPL will move $33.50 this week in either direction, or 5 percent: ATM straddle price/strike price.

If RIMM is trading $7.50 and there is no 7.5 strike price, then I can look at the OTM strangle to get an implied move. I can add the price of the 7 puts, $.50, to the 8 calls, $.50, to get an $1.00 OTM strangle. I can now divide the strangle price, $1, by $7.50 (strike price) to get an implied move of 20 percent. Since this is a strangle, you would need the stock to move a total of $1.50 ($1.00 + $0.50) to receive either out-of-the money strike.

M: Measured Move Target

I look at the current price of the ATM straddle, the ATM calls, and the ATM puts and add them to get the ATM straddle price. There will

always be two *measured moves on earnings*: one to the upside and one to the downside. The upside measured move target will be the strike price plus the ATM straddle. The downside measured move target will be the strike price minus the price of the ATM straddle. If I am using the OTM strangle instead of the ATM straddle, my upside measured move target would be the call strike plus the price of the strangle. The downside measured move target would be the put strike price minus the price of the strangle.

Once I have a good comparison for how the stock has moved in the past on earnings announcements, and what the market is implying its move will be on the current announcement, I am ready to start looking at what *type* of trade to put on.

Which Type of Option?

Since this is considered a "catalyst" trade, I always try to trade the stock's weekly options first. I know that this trade will probably be short in duration and I don't want to pay for extra *time value premium* if I don't have to. Not every stock has weekly options; if there are no weekly options, then I will trade the front-month options, but I tend to have better success with the weekly options. I would much prefer to play the catalyst and be done, rather than worry about the stock market as a whole. Even though I consider every strategy in my arsenal, my favorite strategies for earnings plays are vertical spreads, condors, butterflies, and straddles.

Beware! Keep a Keene eye on the liquidity of the options you are looking to trade. I like to stay with liquidity: Less-liquid options have wider bid/ask spreads and are often harder to execute.

We are now ready to move on to the rest of the *HIMCRIBBIT* Trading Plan.

C: Chart

I look to see if the chart is in a bull or bear channel, that is, where it has seen previous support and resistance over the past couple of months. I would rather look at a chart within the past couple of months than one over the past several years for earnings. I also see if it is above or below the Ichimoku Cloud on the daily chart, look at all five of my Ichimoku signals and how it has reacted over the past couple of days into earnings.

RRBTT: Risk versus Reward, Breakeven, Time, and Target

To understand this portion of the plan, we are going to go over a few examples in detail so you can see my process of choosing the best trade based on RRBTT. I always want to make sure that I have a good risk/reward setup. I often define my risk versus reward as a percentage of my book. Every trade I place is a percentage of my total book with most earnings trades being less than .5 percent of my total book. This keeps me in a lot of positions and there's never a chance of blowing out my account.

- *Example 1 Iron Condor:* Often I will sell an OTM call spread or OTM put spread in order to take advantage of the high volatility. If I sell an OTM call spread, I can make money whether the stock is flat, or goes down, or it can actually move higher as long as it stays under my breakeven. Once the stock reports earnings, if the stock does not move at all, I will make money on the decrease in volatility.

  If I sell an OTM put spread, I can make money whether the stock is flat, or goes up, or it can actually move lower as long as it stays above my breakeven. Once the stock reports earnings, if the stock does not move at all, I will make money on the decrease in volatility.

- *Example 2 Buying Straddles:* I like this strategy if I think the stock is going to make a big move on earnings. I always look at the historical movement versus the implied movement to figure out which strategy I want to trade. If I notice that the historical movement is greater than the implied movement, often I will buy a straddle. I also like to take advantage of the fact that stocks are open at 6 A.M. CST and close at 7 P.M. CST. Once the stock makes a big move in the afterhours session, I can hedge my position through stock because the options market is only open from 8:30 A.M. to 3:00 P.M. CST. If GMCR is trading $25 and I buy the ATM straddle for $5 on earnings, and the stock is above $30, then my calls will be worth more than $5; if the stock is under $20, then the puts will be trading for $5. So, in the afterhours, if GMCR opens at $45, I may want to lock in some profit, because I know that the 25 calls will be worth $20. However, since the options market is not open in the afterhours session, I have the right to sell stock if the stock trades higher on earnings and buy stock if it goes lower.

- *Keene's Trade:* Once, when I was trading PALM, the stock was trading $45 and I was long the $45 ATM straddle for $9. The stock exploded and

rallied over $5 in the afterhours session. I sold half of my stock against my calls at $50. I went home, turned on CNBC, and noticed the stock was then trading $42 on poor guidance. I went back to work and bought the stock I sold at $50 back at $42. I scalped 5,000 shares of stock for $8, making a $40,000 profit. However, the straddle price's implied volatility went down so much in value that I lost $48,000 in implied volatility. In the end, even though I made $40,000 scalping the stock, I still lost $8,000 total.

- *Example 3 Call and Put Butterfly:* This is my favorite strategy, because I can get a great risk/reward setup. In the Live Trading Room, traders always ask me my favorite trade on earnings. I usually tell them that calendars have the best chance of winning, but the butterflies always have the best risk/reward setup.

  When AAPL was trading $570 the day before earnings, I had a feeling that AAPL was going to rally on earnings. I looked at the implied movement, the historical movement, and then the chart for a good risk/reward setup. I noticed the ATM straddle was $35, which was implying AAPL would sell off to $535 or rally to $605 on earnings. I was bullish on AAPL (go figure), so I bought the weekly 575-605-635 call butterfly for $5. I was risking $500 per 1 lot to possibly make a $2,500 profit. The stock closed the week at $603, the call butterfly that I bought at $5 went to $28, and I made almost a 600 percent return within days.

  My general rule on call or put butterflies is to take half of my position off at a double and leave the other half on until expiration. This way I am always playing with the house's money and have potential to make even more profits.

- *Example 4 Iron Condor:* When I think that the stock is stuck in a range and will not make a big movement in earnings, then I will sell a condor. This way I am placing a bet, not on the direction, but on the *lack* of direction. When WMT was trading $74, and I did not think it would make a big movement on earnings, as I went through the *HIMCRRBTT* Trading Plan, I sold the WMT August 72.5-70 bull credit put spread and the 75-77.5 bear credit call spread for $.90 total. After WMT reported earnings, the stock did not move very much and the spread went from $.90 to $.30 within a week. This trade was good for another three times my money by the time I closed it out.

Every stock is different, every chart is different, and so there is a different options strategy for every trade. I went over this very intensively in an earlier chapter: I never want to take delivery of stock after expiration is over. Similarly, I would not want 5,000 tons of corn delivered to my house if I was long corn calls and they expired in-the-money. These are trades for *earnings*, so I want to take them off after earnings and the catalyst is over. I will surely take these positions off by the day after earnings, as they would convert to long or short stock if not managed properly.

Calendars and Advanced Topics

I have tried to trade double calendars for earnings, but they do not seem to work out very well. This strategy has been around for a long time, but I have traded them in GS, AMZN, and ISRG and the risk/reward setup is not the greatest. I will show you an example of one, anyway. GS was trading $95 right before earnings. I looked at the weekly $95 straddle and it was trading $5. My thoughts were: "Perfect, I can buy the September 90 put and September 100 call strangle and sell the weekly 90 put and 100 call strangle for a debit of $4.80. Hopefully, the weekly strangle will be worthless and I will be left with the September 90 put–100 call strangle for $4.80." The next day, GS opened up at $100. I looked at my spread and the volatility in September got crushed so bad that this spread was only trading $5. In this case, my trade risked $480 per 1 lot and I only made $20 per 1 lot, and the stock ended up exactly where I wanted it to end up. This being said, I haven't been trading calendar spreads a lot recently. It's a tricky trade, and the risk/reward payoff is not usually in my favor.

Trading for a Living

As much as I love it, trading for a living can be very stressful. There was a time in 2007 and 2008 when my P&L was swinging $30,000 a day. At that time I had a backer, but 80 percent of that money was mine. In other words, on a daily basis my net worth was moving up and down $25,000. I have done well trading, but it is not like I have made $100 million; I could have a bad couple of months and be out of business. Since I am no longer a market maker, I make sure that every trade is a percentage of my total book. This way, I can keep every trade in line.

Confidence Scale

The biggest position is one that I'd grade at 1 on my Confidence Scale. If I grade a trade at 1 on my Confidence Scale, I'll commit 5 to 15 percent of my total book to it. A trade that I'd grade at 1 doesn't come across my books too often, but in the past, I've graded a long stock position in AAPL at 1 after a selloff on earnings. There are two key elements I try to keep in mind when I'm trading: (1) Dump the losers and (2) let the winners ride. There are three well-known facts of making a living in the markets: (1) Trading is not for everyone; (2) everyone thinks they have what it takes to be a trader; and (3) most people don't have what it takes to be a trader. The lifespan of the average trader is 18 months. This is because most new traders are not skilled at looking at trades with risk versus reward in mind. It doesn't matter what security the trade is in; the *setup* is the most important element of the trade and is the key element in a profitable one.

If a stock is 50–50 to go up or down, I would never set up a trade where I am risking $1,500 if it goes down $2, but only stand to make $1,000 if it goes up $2. I often don't make trades where the math does not line up logically. In other words, I do not sell $1 call spreads for $.10 because the risk versus reward does not line up for me. Think of it this way: If my buddy said I could make a half-court shot on the basketball court, I'd say, "Yes, I would bet even money on that." On the other hand, if he said he wanted to put up $100 against $1,000 I put up, I wouldn't take the bet, because my risk versus reward does not line up for a good trade payout versus risk. This is a very important concept to understand, the risk/reward concept. If done properly, this knowhow can go a long way in keeping an account profitable. On the other hand, too many trades made with a poor risk/reward ratio can lead to disaster, and possibly blow up a trading account for good.

Another key element in the trading world: Never take it personally. On the trading floor, they used to call traders "cheerleaders" when they would root for a stock to move either higher or lower on a daily basis. Traders often make exasperated comments like, "Of course! The *one time* I get long AAPL for earnings, the stock moves lower!" Or, "The *one time* I get long straddles for earnings, GOOG doesn't want to move!" Keep in mind that options trading is a *long-term goal*. Trading is a *war*, not a battle, and the math is always going to favor the good trader. Traders who don't think like this are destined for a rough road.

Imagine playing the best poker of your life for five days and making it to the final table at the World Series of Poker. With four players left you

have AA, pocket aces, the best hand in poker. You sucker some player into moving all-in with pocket 9s. Obviously, you call all your chips with the pocket aces with the best hand in Texas Hold'Em. The flop is 2, 6, 8—you say to yourself: "Perfect!" Then, the turn is a Jack and you are one card away from doubling up your chips and becoming the chip leader at the final table at the World Series Main Event. Then comes the river, a 9. You've lost all your chips and are out of the tournament. Are you pissed? Yes, but that does not mean that you should not have gone all-in with the pocket aces. The sign of a great trader (or a great poker player) is not how well he is doing when he is making money or on top, but how well he is trading when he has been trading poorly and is losing money. In this example, will this poker player now go dump a bunch of money in a cash game, because he is angry that he got "rivered" for a huge amount of money? Or will he say to himself, "I make a career playing poker, and every so often something like this happens and I've got to move on." Good traders are like the pro poker player: They play to win; they take the calculated risks and expect to win, but sometimes they lose. A loss here or there won't wipe out the professional trader because he knows how to limit the trades he makes to the ones with good risk/reward potential, and he limits the size of his positions to only a fraction of his total book. This combination of strategies and knowhow can lead to a trading situation that a has limited chance for loss, and an even more limited chance for an account to be totally blown out.

Trading is my life, my career, and the means to an income. If I were not a profitable trader, then I would not trade. Since I am profitable, I will continue to do what I love: trading and teaching trading.

Tricks and Tips

I was at a speaking engagement in Chicago and a trader in the audience asked me what percentage of my trades were winners? I looked at him and said, "It does not really matter as long as I am profitable overall." What does this mean? Let's break down a few trades that I could have on (all trades were actual positions):

1. I am long the AAPL 575-605-635 call fly for $5 for 4 percent of my book: 2 on Confidence Scale.
2. I am short the GRPN 4-3.5 put spread for $.25 for 1 percent of my book: 4 on Confidence Scale.

3. I am long the WMB January 36-40 call spread for $.50 for 1 percent of my book: 4 on Confidence Scale.
4. I am long the LVS weekly 45.5-44.5-43.5 put fly for $.10 for .5% of my book: 5 on Confidence Scale.

Let's say that I am trading with a $100,000 account and look at the risk versus reward of each trade:

AAPL 575-605-635 call fly for $5
Lot size: 8
Risk: $4,000
Reward: $20,000

GRPN 4-3.5 put spread for $.25
Lot size: 40
Risk: $1,000
Reward: $1,000

WMB January 36-40 call spread for $1.06
Lot size: 20
Risk: $1,000
Reward: $3,000

LVS weekly 45.5-44.5-43.5 put fly for $.10
Lot size: 50
Risk: $500
Reward: $4,500

I always set up my trades on a good risk/reward basis. Let's say that AAPL call fly went to $28 (which it did) on earnings. So, for AAPL I would make $18,400. Let's say that on trades #2, #3, and #4 I lost the maximum value, $1,000, $1,000, and $500. So, I had four trades on, one winner and three losers, but I still made $15,900 on a $6,500 investment and was good for 244 percent. Yes, I did lose three out of the four times, but as long as I structure my trades with good risk/reward setups on measured move targets with the odds on my side, in the long run I will be a profitable trader. I launched the Live Trading Room in February 2012 and have seen great reviews and support, not only from profitable trades, but from teaching traders the proper way to trade. If I sell a $1.00 condor for $.10 every week, I will make money 9 out of 10 times in the long run, because the delta of

this trade is 10, but on the 10th time I will lose all my profits. This is why I structure all my trades the way I do, determining a confidence level for every trade and the percentage of my total portfolio I am willing to lose.

After having been a market maker, I took all the tricks I learned on the trading floor and moved them upstairs to the trading room. One of them is to always know how much an option is worth. What something is worth is the difference between what someone is willing to pay for it and what another is willing to sell it for. So, if I look at a call spread in the spread book and the market is $.95–$1.05, I know the call spread is worth $1. So, if I enter an order to buy the call spread for $1.01, then there is a chance I will get filled. If I enter a trade order to sell it for $.99, then there is also a chance that I will be filled. So, entering orders *knowing the value* of the option or option spread helps save me money in the long run. Similarly, if I went to an art auction, I would want to pay the lowest price possible above my budget. This would allow me to still have money for other things in the future.

Let's look at a perfect real-time example of the Electronic Eye software. (Electronic Eye software will detect smaller orders that in favorable advantage of the computer software and fill the customer, almost as a courtesy.) For earnings I wanted to buy the DE November weekly 85-82.5-80 put butterfly for around $.40. I took out the spread book and entered the trade, buying one November weekly 85 put, buying one November weekly 80 put, and selling two of the November weekly 82.5 puts. The market was $.34–$.42. This means that the market maker is willing to pay $.34 for this spread and sell it at $.42. The old market-maker trick was the absolute middle of the spread, known as the *fair value*. So, $.34 plus $.42 divided by two is $.38. I then put a $.40 bid in the spread book for this trade and got filled within seconds. This is because the Electronic Eye software has the spread worth $.38, so the trading firm would be happy to sell the spread for $.40. This is not going to work on 200-lot orders, because the order will be bigger than the market, but it works very well in 10- to 50-lot orders. This is one the best tricks I have learned from the trading floor and moved upstairs.

In another one of my trading exploits, ULTA was trading $92 and the measured move target was $8, so I bought the ULTA December 95-100-105 call fly for $.80. I was risking $80 per 1 lot to profit $4.20 with my breakeven points at $95.80 and $104.20. I knew that the day after earnings, if the stock moved to the measured move target, I would take off half of the position at a double and leave the other half until expiration.

Since I've been trading for so many years, I know that as the stock approaches $100, my gamma will become negative and theta positive. But, too many traders now worry about their Greeks; the Greeks do matter, but retail traders are not market makers and they should put on risk-versus-reward trades, and not worry about the Greeks. Too many traders do not actually understand the Greeks and how they relate to options trading. For example, there are *soft deltas* and *hard deltas*. Keep all this in mind when choosing a broker: Figure out what works for your trading style and go with it.

Questions

1. Using the *HIMCRRBTT* Trading Plan, the first thing to look at when trading earnings is the historical volatility of the previous _____.
   - **a.** 2 years
   - **b.** 2 months
   - **c.** 4 months
   - **d.** 4 quarters
2. Which of the time periods in Question #1 is the most important?
   - **a.** 4 quarters
   - **b.** 2 years
   - **c.** The average of the periods
   - **d.** All of the time periods in Question #1
3. If a stock has sold off for the last _____ (see Question #1), then there is a good chance it will sell off in the next period as well.
   - **a.** 2 years
   - **b.** 2 months
   - **c.** 4 months
   - **d.** 4 quarters
4. After an earnings announcement is made, the implied volatility component of an option can collapse because the uncertainty is now relieved by the new data that came to light with the announcement.
   - **a.** True
   - **b.** False
5. The downside of the measured move target is the _____ strike price minus the price of the _____.
   - **a.** Call/brokerage fees
   - **b.** Put/interest fees
   - **c.** Butterfly/strangle
   - **d.** ATM straddle price/straddle

(*Continued*)

Questions (*Continued*)

6. When you trade a stock's weekly options you are saved from paying _____.
   a. Too much in brokerage fees
   b. Too much in interest rates
   c. Too much in intrinsic premium
   d. Too much in time value premium
7. A bull or bear channel is where the stock has been in a previous support and resistance over the past couple of months.
   a. True
   b. False
8. The best options strategy for an earnings play is the _____.
   a. Vertical spread
   b. Condor
   c. Butterfly
   d. Straddle
   e. All of the above
9. One of the best ways to keep risk in check is to look at each trade as a percentage of your book.
   a. True
   b. False
10. The trade that usually has the best risk/reward setup for earnings is the _____.
    a. Vertical spread
    b. Condor
    c. Butterfly
    d. Straddle
    e. None of the above
11. Double calendars are among the best and easiest trade setups for earnings plays.
    a. True
    b. False
12. Using the *HIMCRRBTT* Trading Plan keeps me from making bullish trades when the stock historically sells off on earnings.
    a. True
    b. False
13. Andrew goes over 4 to 6 earnings trades using the *HIMCRRBTT* Trading Plan daily in the Live Trading Room.
    a. True
    b. False

CONCLUSION

One of my favorite expressions of all time is, "Rome wasn't built in a day." Just like anything worthwhile, learning how to properly trade equity options requires discipline, patience, and most of all, hard work. The most successful traders certainly didn't make their fortunes overnight—in fact, most of them probably began their careers similarly to the way I did as a young, inexperienced clerk, determined to learn as much as possible in order to succeed in the business. While the "new wave" of trading doesn't necessarily include roulette tables and games of craps with the instructors after the close, the core principles remain the same. It can take weeks, months, or even years to hone the skills needed to be an expert options trader.

Obviously, traders have different goals, opinions, and most importantly, risk tolerance. These variables will help you decide early on what type of trader you are so you can then create a unique trading plan that is right for you. Ask yourself questions like: "Do I trade better in the morning or afternoon?"; "Are there certain stocks I trade better than others?"; "Do I perform better during a certain part of the week?"

I tell all my clients and traders the same thing, I can't guarantee profitability. However, if you join my trading room, employ my trading plan, and adopt the trading style I have outlined in this book, what I can promise you is that you will be a far better trader than you have ever been before. Keep in mind, failure is not only part of every business, but also a very necessary part of success. Michael Jordan once said, "I've missed more than 9,000 shots in my career. I've lost almost 300 games. Twenty-six times I've

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been trusted to take the game winning shot and missed. I've failed over and over and over again in my life. And that is why I succeed."

Go slow, stay humble, and remember I will always be in your corner and available for any questions. E-mail me: andrew@keeneonthemarket.com or tweet me: @KeeneOnMarket, I'm happy to help.

ANSWERS TO END-OF-CHAPTER QUESTIONS

Chapter 1

1. d
2. c
3. b
4. b
5. b
6. d
7. c
8. b
9. a
10. d

Chapter 2

1. b
2. d
3. a
4. a
5. b
6. d
7. d
8. c
9. e
10. c

Chapter 3

1. d
2. d
3. c
4. a
5. a
6. d
7. d
8. a

Chapter 4

1. d
2. d
3. d
4. d
5. a
6. d
7. d
8. d
9. b
10. d
11. b

Chapter 5

1. b
2. d
3. d
4. d
5. d
6. a
7. d
8. a

Chapter 6

1. e
2. d
3. c
4. d
5. e
6. a
7. d
8. d

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Chapter 7

1. b
2. d
3. b
4. a
5. a
6. b
7. b
8. a
9. d

Chapter 8

1. b
2. d
3. c
4. d
5. c
6. a
7. b
8. b
9. a and b
10. d
11. d
12. b

Chapter 9

1. a
2. d
3. d
4. c
5. a
6. b
7. a
8. d
9. a
10. d

Chapter 10

1. d
2. a
3. a
4. b
5. b
6. e
7. a
8. b
9. b
10. b
11. a

Chapter 11

1. a
2. d
3. a
4. c
5. d
6. a
7. a
8. a
9. c

Chapter 12

1. b
2. a
3. b
4. a
5. e
6. a
7. a
8. c
9. a
10. a
11. e
12. d

Chapter 13

1. a
2. d
3. a
4. d
5. e
6. b
7. b

Chapter 14

1. a
2. d
3. d
4. a and c
5. b
6. a
7. b
8. c
9. a
10. a

Chapter 15

1. b
2. a
3. a
4. d
5. a
6. b
7. d
8. a
9. a
10. a

Chapter 16

1. a
2. d
3. a
4. d
5. b
6. b
7. c
8. b
9. a
10. a
11. b
12. a

Chapter 17

1. a
2. a
3. b
4. d
5. d
6. c
7. a
8. d
9. b
10. c

Chapter 18

1. a
2. d
3. c
4. b
5. b
6. b
7. b
8. d
9. a
10. c
11. a
12. a

Chapter 19

1. d
2. c
3. d
4. a
5. d
6. d
7. a
8. e
9. a
10. c
11. b
12. a
13. a

ABOUT THE AUTHOR

Andrew Keene was an independent equity options trader on the Chicago Board of Options Exchange for 11 years. He spent most of that time as a market maker in over 125 stocks, including Apple, General Electric, Goldman Sachs, and Yahoo! From 2006–2009, Andrew was the biggest, independent on-the-floor Apple trader in the world. Currently, Andrew is actively trading equity options, futures, currency pairs, and commodities.

Andrew has become one of the CBOE's most recognized faces in the media and financial community, making regular appearances on Bloomberg, BNN, CNBC, Fox Business, Sky Australia, and his own show on CBOETV. He is also a regular contributor for Bloomberg Radio, DailyForex.com, Minyanville.com, and Jim Cramer's TheStreet.com.

Andrew received a B.S. in finance with a concentration in accountancy from the University of Illinois.

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